



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 188266

TO: Nita M Minnifield
Location: rem-3c01/3c18
Art Unit: 1645
Wednesday, May 10, 2006
Case Serial Number: 08/170344

From: Kristine Hensle
Location: Biotech-Chem Library
REM-1B69
Phone: (571)272-4161

Kristine.Hensle@uspto.gov

Search Notes

Examiner Minnifield,

See attached results. This packet is part 2 of 8.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Kristine Hensle
Librarian
STIC Biotech/Chem Library
(571)272-4161

*Reviewed
5/11/06
mm*

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 04:48:55 ; Search time 20.7 Seconds
(without alignments)
35.946 Million cell updates/sec

Title: US-08-170-344-10
Perfect score: 48
Sequence: 1 PAFRDLCTIV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Issued Patents_AA: *
1: /cgn2_6/prodata/1/1aa/5_COMB.pep: *
2: /cgn2_6/prodata/1/1aa/6_COMB.pep: *
3: /cgn2_6/prodata/1/1aa/H_COMB.pep: *
4: /cgn2_6/prodata/1/1aa/ECTUS_COMB.pep: *
5: /cgn2_6/prodata/1/1aa/RE_COMB.pep: *
6: /cgn2_6/prodata/1/1aa/backfilest1.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	48	100.0	9	1	US-08-787-547-103
2	48	100.0	9	2	US-08-197-484-67
3	48	100.0	9	4	PCT-US95-02121-67
4	48	100.0	22	2	US-09-980-523A-6
5	48	100.0	23	2	US-09-601-729-276
6	48	100.0	151	2	US-09-701-080C-18
7	48	100.0	158	2	US-09-980-523A-2
8	48	100.0	162	1	US-08-316-239B-3
9	48	100.0	162	1	US-08-316-239B-4
10	48	100.0	172	2	US-08-660-165-14
11	48	100.0	172	2	US-09-359-382-14
12	48	100.0	243	2	US-09-462-993-1
13	48	100.0	266	2	US-08-860-165-10
14	48	100.0	266	2	US-09-359-382-10
15	48	100.0	266	2	US-09-367-309A-1
16	48	100.0	273	2	US-09-485-885-10
17	48	100.0	292	2	US-09-485-885-10
18	48	100.0	371	2	US-09-485-885-6
19	48	100.0	380	2	US-09-485-885-14
20	47	97.9	182	1	US-08-117-083-10
21	43	89.6	201	1	US-08-934-915-161
22	40	83.3	14	1	US-07-909-122-4
23	37	77.1	162	2	US-09-489-847-160
24	37	77.1	207	2	US-09-489-847-320
25	37	77.1	482	2	US-09-999-833A-7
26	37	77.1	492	2	US-10-020-445A-7
27	35	72.9	411	2	US-09-949-016-6312

28	72.9	414	2	US-09-949-016-9493	Sequence 9493, Ap
29	70.8	263	2	US-08-776-059-43	Sequence 43, Appl
30	70.8	263	2	US-09-627-165E-10	Sequence 10, Appl
31	70.8	263	2	US-09-627-165E-12	Sequence 12, Appl
32	70.8	263	2	US-09-601-667C-6	Sequence 6, Appl
33	70.8	264	2	US-08-776-059-33	Sequence 33, Appl
34	70.8	264	2	US-09-601-667C-3	Sequence 3, Appl
35	70.8	264	2	US-09-601-667C-7	Sequence 7, Appl
36	70.8	264	2	US-09-601-667C-9	Sequence 9, Appl
37	70.8	264	2	US-09-601-667C-8	Sequence 8, Appl
38	70.8	264	2	US-09-601-667C-10	Sequence 10, Appl
39	70.8	264	2	US-09-601-667C-11	Sequence 11, Appl
40	70.8	379	2	US-09-252-991A-26698	Sequence 26698, A
41	70.8	531	2	US-09-601-667C-4	Sequence 4, Appl
42	70.8	533	2	US-09-601-667C-1	Sequence 1, Appl
43	70.8	534	2	US-09-601-667C-40	Sequence 40, Appl
44	70.8	564	2	US-08-776-059-35	Sequence 35, Appl
45	70.8	158	1	US-08-247-904B-10	Sequence 7008, Ap
46	68.8	158	2	US-08-767-942A-19	Sequence 19, Appl
47	68.8	158	2	US-08-117-083-14	Sequence 14, Appl
48	68.8	271	1	US-08-117-083-14	Sequence 21, Appl
49	68.8	349	2	US-09-485-885-21	Sequence 96, Appl
50	68.8	383	2	US-09-491-577-96	Sequence 61639, A
51	68.8	383	2	US-09-485-885-23	Sequence 23, Appl
52	68.8	415	2	US-09-583-110-4250	Sequence 4250, Ap
53	68.8	3074	2	US-09-543-681A-5508	Sequence 5508, Ap
54	68.8	109	2	US-09-270-767-31915	Sequence 31915, A
55	68.8	133	2	US-09-270-767-31721	Sequence 37271, A
56	68.8	231	2	US-09-270-767-52938	Sequence 52938, A
57	68.8	231	2	US-09-270-767-61639	Sequence 61639, A
58	68.8	274	2	US-09-614-912-160	Sequence 160, Appl
59	68.8	327	1	US-08-118-270-55	Sequence 55, Appl
60	68.8	327	4	PCT-US93-08528-55	Sequence 55, Appl
61	68.8	335	2	US-09-543-681A-5733	Sequence 5733, Ap
62	68.8	345	2	US-09-489-039A-9386	Sequence 9386, Ap
63	68.8	369	2	US-09-252-991A-20414	Sequence 20414, A
64	68.8	420	2	US-08-795-876-33	Sequence 33, Appl
65	68.8	423	2	US-08-795-876-38	Sequence 38, Appl
66	68.8	436	2	US-08-795-876-2	Sequence 2, Appl
67	68.8	598	2	US-09-270-767-46086	Sequence 46086, A
68	68.8	685	2	US-09-443-780C-13	Sequence 13, Appl
69	68.8	685	2	US-09-079-723-181	Sequence 181, Appl
70	68.8	685	2	US-09-949-016-5928	Sequence 5928, Ap
71	68.8	692	2	US-07-757-342D-6	Sequence 6, Appl
72	68.8	692	2	US-09-461-657B-6	Sequence 6, Appl
73	68.8	695	1	US-08-487-886-2	Sequence 2, Appl
74	68.8	695	2	US-08-474-986-2	Sequence 2, Appl
75	68.8	755	2	US-08-107-532A-3693	Sequence 3693, Ap
76	68.8	755	2	US-07-727-814B-2	Sequence 2, Appl
77	68.8	1288	1	US-08-258-614-2	Sequence 2, Appl
78	68.8	9	2	US-08-159-339A-246	Sequence 246, Appl
79	68.8	9	2	US-08-159-339A-564	Sequence 564, Appl
80	68.8	170	2	US-09-270-767-31964	Sequence 31964, A
81	68.8	170	2	US-09-270-767-47181	Sequence 47181, A
82	68.8	269	2	US-09-270-767-61776	Sequence 61776, A
83	68.8	376	2	US-09-252-991A-24606	Sequence 24606, A
84	68.8	394	2	US-09-107-433-5185	Sequence 5185, Ap
85	68.8	415	2	US-09-328-352-4763	Sequence 4763, Ap
86	68.8	75	2	US-09-513-999C-5023	Sequence 5023, Appl
87	68.8	103	1	US-08-448-561-1	Sequence 1, Appl
88	68.8	103	1	US-08-448-561-4	Sequence 4, Appl
89	68.8	121	2	US-09-328-352-6634	Sequence 6634, Ap
90	68.8	122	2	US-09-270-767-37760	Sequence 37760, A
91	68.8	132	2	US-09-270-767-52977	Sequence 52977, A
92	68.8	132	2	US-09-270-767-61140	Sequence 61140, A
93	68.8	140	2	US-09-621-976-5855	Sequence 5855, Ap
94	68.8	172	2	US-09-248-796A-27956	Sequence 27956, A
95	68.8	185	2	US-09-122-443-16	Sequence 16, Appl
96	68.8	185	2	US-09-558-089-16	Sequence 16, Appl
97	68.8	185	2	US-09-558-087-16	Sequence 16, Appl
98	68.8	185	2	US-09-558-087-16	Sequence 16, Appl
99	68.8	194	2	US-09-270-767-45631	Sequence 45631, A
100	68.8	194	2	US-09-270-767-45631	Sequence 45631, A

111	30	62.5	204	2	US-09-230-637-25	Sequence 25, Appl	174	28	58.3	65	2	US-09-270-767-58787	Sequence 58787, A
102	30	62.5	204	2	US-09-230-371A-26	Sequence 26, Appl	175	28	58.3	66	2	US-09-328-352-6925	Sequence 6925, Ap
103	30	62.5	218	2	US-09-198-452A-282	Sequence 282, App	176	28	58.3	67	2	US-09-328-352-7423	Sequence 7423, Ap
104	30	62.5	227	2	US-09-270-767-33303	Sequence 32303, A	177	28	58.3	70	2	US-09-894-882-161	Sequence 161, App
105	30	62.5	292	2	US-09-438-185A-272	Sequence 272, App	178	28	58.3	71	2	US-09-107-433-4429	Sequence 4429, Ap
106	30	62.5	327	2	US-09-248-796A-14302	Sequence 14302, A	179	28	58.3	73	2	US-09-248-796A-21888	Sequence 21888, A
107	30	62.5	361	2	US-09-248-796A-14778	Sequence 14778, A	180	28	58.3	74	2	US-09-387-671-8	Sequence 8, Appl1
108	30	62.5	364	2	US-09-252-991A-19881	Sequence 19881, A	181	28	58.3	74	2	US-09-651-665-8	Sequence 8, Appl1
109	30	62.5	399	2	US-09-489-039A-14312	Sequence 14312, A	182	28	58.3	76	2	US-09-621-976-6064	Sequence 6064, Ap
110	30	62.5	474	2	US-09-315-444-116	Sequence 116, App	183	28	58.3	84	2	US-09-489-847-157	Sequence 157, App
111	30	62.5	474	2	US-09-721-352-116	Sequence 116, App	184	28	58.3	92	2	US-09-270-767-58044	Sequence 319, App
112	30	62.5	545	2	US-09-248-796A-20045	Sequence 20045, A	185	28	58.3	102	2	US-09-270-767-58044	Sequence 18544, A
113	30	62.5	545	2	US-09-248-796A-16759	Sequence 16759, A	186	28	58.3	110	2	US-09-252-991A-17722	Sequence 17722, A
114	30	62.5	598	2	US-09-270-767-37973	Sequence 37973, A	187	28	58.3	114	2	US-10-142-835-2	Sequence 2, Appl1
115	30	62.5	598	2	US-09-270-767-37973	Sequence 37973, A	188	28	58.3	141	2	US-09-513-999C-5637	Sequence 5637, Ap
116	30	62.5	688	2	US-09-270-767-53190	Sequence 53190, A	189	28	58.3	152	2	US-09-270-767-42726	Sequence 42726, Ap
117	30	62.5	688	2	US-09-538-092-388	Sequence 388, App	190	28	58.3	185	2	US-09-270-767-57496	Sequence 57496, A
118	30	62.5	913	2	US-09-487-558B-378	Sequence 378, App	191	28	58.3	197	2	US-09-270-767-33420	Sequence 33420, A
119	30	62.5	997	2	US-09-252-991A-29362	Sequence 29362, A	192	28	58.3	197	2	US-09-270-767-48637	Sequence 48637, A
120	30	62.5	2942	2	US-09-369-364A-7	Sequence 7, Appl1	193	28	58.3	198	2	US-09-489-039A-9420	Sequence 9420, Ap
121	29	60.4	62	1	US-09-902-540-9733	Sequence 9733, Ap	194	28	58.3	203	2	US-09-252-991A-19153	Sequence 19153, A
122	29	60.4	62	1	US-08-702-080-5	Sequence 5, Appl1	195	28	58.3	205	2	US-09-252-991A-25778	Sequence 25778, A
123	29	60.4	62	1	US-08-858-833-5	Sequence 5, Appl1	196	28	58.3	205	2	US-09-270-767-44526	Sequence 44526, A
124	29	60.4	69	2	US-09-270-767-40017	Sequence 40017, A	197	28	58.3	207	2	US-09-270-767-61884	Sequence 61884, A
125	29	60.4	69	2	US-09-270-767-55233	Sequence 55233, A	198	28	58.3	209	2	US-09-771-161A-94	Sequence 94, Appl1
126	29	60.4	109	2	US-09-071-035-194	Sequence 194, App	199	28	58.3	236	2	US-09-248-796A-17542	Sequence 17542, A
127	29	60.4	109	2	US-10-206-576-194	Sequence 194, App	200	28	58.3	236	2	US-09-328-352-6478	Sequence 6478, Ap
128	29	60.4	116	2	US-09-248-796A-25995	Sequence 25995, A	201	28	58.3	257	2	US-09-328-352-5511	Sequence 5511, Ap
129	29	60.4	118	2	US-09-270-767-58803	Sequence 58803, A	202	28	58.3	264	2	US-08-969-644-16	Sequence 16, Appl
130	29	60.4	123	2	US-09-134-000C-4445	Sequence 4445, Ap	203	28	58.3	264	2	US-08-444-189-16	Sequence 16, Appl
131	29	60.4	126	2	US-09-621-976-4297	Sequence 4297, Ap	204	28	58.3	264	2	US-08-468-544-16	Sequence 16, Appl
132	29	60.4	133	2	US-09-270-767-59538	Sequence 59538, A	205	28	58.3	268	2	US-09-583-110-2849	Sequence 2849, Ap
133	29	60.4	148	2	US-09-902-540-12180	Sequence 12180, A	206	28	58.3	294	2	US-10-087-013-7	Sequence 7, Appl1
134	29	60.4	150	2	US-10-142-835-6	Sequence 6, Appl1	207	28	58.3	295	2	US-09-489-039A-13006	Sequence 13006, A
135	29	60.4	156	2	US-09-902-540-15320	Sequence 15320, A	208	28	58.3	298	1	US-08-118-270-76	Sequence 76, Appl
136	29	60.4	168	2	US-09-270-767-43450	Sequence 43450, A	209	28	58.3	386	2	PCT-US93-08528-76	Sequence 76, Appl
137	29	60.4	171	2	US-09-270-767-37788	Sequence 37788, A	210	28	58.3	389	2	US-09-108-020-35	Sequence 35, Appl1
138	29	60.4	171	2	US-09-270-767-52995	Sequence 52995, A	211	28	58.3	389	2	US-09-688-296-35	Sequence 35, Appl1
139	29	60.4	180	2	US-09-270-767-32142	Sequence 32142, A	212	28	58.3	401	2	US-10-142-835-18	Sequence 18, Appl
140	29	60.4	180	2	US-09-270-767-47359	Sequence 47359, A	213	28	58.3	401	2	US-10-142-835-20	Sequence 20, Appl
141	29	60.4	222	2	US-09-949-016-5983	Sequence 5983, Ap	214	28	58.3	414	2	US-09-270-767-45014	Sequence 45014, A
142	29	60.4	223	2	US-09-328-352-7564	Sequence 7564, Ap	215	28	58.3	432	2	US-09-270-767-45014	Sequence 45014, A
143	29	60.4	234	2	US-10-104-047-2791	Sequence 2791, Ap	216	28	58.3	432	2	US-09-270-767-43435	Sequence 43436, A
144	29	60.4	239	2	US-09-949-016-9708	Sequence 9708, Ap	217	28	58.3	436	2	US-09-270-767-46653	Sequence 46653, A
145	29	60.4	240	2	US-09-543-681A-7420	Sequence 7420, Ap	218	28	58.3	436	2	US-09-270-767-46653	Sequence 10833, A
146	29	60.4	268	2	US-09-134-000C-3519	Sequence 3519, Ap	219	28	58.3	440	2	US-09-489-039A-10833	Sequence 46314, A
147	29	60.4	305	2	US-09-248-796A-20071	Sequence 20071, A	220	28	58.3	455	2	US-09-270-767-46314	Sequence 9, Appl1
148	29	60.4	307	2	US-09-489-039A-9062	Sequence 9062, Ap	221	28	58.3	460	1	US-08-351-981-9	Sequence 2, Appl1
149	29	60.4	357	1	US-08-119-773-36	Sequence 36, Appl	222	28	58.3	464	2	US-09-950-022A-2	Sequence 4, Appl1
150	29	60.4	357	2	US-09-874-133-25	Sequence 25, Appl	223	28	58.3	464	2	US-09-950-022A-6	Sequence 6, Appl1
151	29	60.4	367	2	US-09-489-039A-9718	Sequence 9718, Ap	224	28	58.3	464	2	US-09-950-022A-8	Sequence 8, Appl1
152	29	60.4	386	2	US-09-270-767-44120	Sequence 44120, A	225	28	58.3	464	2	US-09-950-022A-8	Sequence 8, Appl1
153	29	60.4	390	2	US-09-902-540-12817	Sequence 12817, A	226	28	58.3	464	2	US-09-950-022A-10	Sequence 10, Appl
154	29	60.4	403	2	US-09-503-391-8	Sequence 8, Appl1	227	28	58.3	467	2	US-09-270-767-46608	Sequence 46608, A
155	29	60.4	406	2	US-10-142-835-33	Sequence 33, Appl	228	28	58.3	483	2	US-09-107-532A-5896	Sequence 5896, Ap
156	29	60.4	407	2	US-10-142-835-22	Sequence 22, Appl	229	28	58.3	495	2	US-09-252-991A-19330	Sequence 19330, A
157	29	60.4	412	2	US-09-902-540-11614	Sequence 11614, A	230	28	58.3	511	2	US-09-633-328B-4	Sequence 4, Appl1
158	29	60.4	487	2	US-09-489-039A-10539	Sequence 10539, A	231	28	58.3	512	2	US-09-633-328B-2	Sequence 2, Appl1
159	29	60.4	487	2	US-09-252-991A-29392	Sequence 29392, A	232	28	58.3	532	2	US-09-991-161-381	Sequence 381, App
160	29	60.4	538	2	US-09-489-039A-9433	Sequence 9433, Ap	233	28	58.3	532	2	US-09-990-444-381	Sequence 381, App
161	29	60.4	555	2	US-09-890-813-8	Sequence 8, Appl1	234	28	58.3	532	2	US-09-997-333-381	Sequence 381, App
162	29	60.4	555	2	US-09-949-016-8841	Sequence 8841, Ap	235	28	58.3	532	2	US-09-992-598-381	Sequence 381, App
163	29	60.4	654	2	US-09-949-016-8842	Sequence 8842, Ap	236	28	58.3	548	1	US-08-466-576B-19	Sequence 19, Appl
164	29	60.4	722	2	US-09-710-279-1230	Sequence 1230, Ap	237	28	58.3	548	1	US-08-466-576B-19	Sequence 19, Appl
165	29	60.4	729	2	US-09-134-001C-4728	Sequence 4728, Ap	238	28	58.3	548	1	US-08-466-576B-19	Sequence 19, Appl
166	29	60.4	730	2	US-09-398-865A-2	Sequence 2, Appl1	239	28	58.3	574	2	US-09-107-433-3264	Sequence 3264, Ap
167	29	60.4	730	2	US-09-710-71A-2	Sequence 2, Appl1	240	28	58.3	657	2	US-09-949-016-7183	Sequence 7183, Ap
168	29	60.4	791	2	US-09-543-681A-5446	Sequence 5446, Ap	241	28	58.3	678	2	US-09-270-767-42257	Sequence 42257, A
169	29	60.4	2749	2	US-10-360-101-265	Sequence 265, App	242	28	58.3	681	2	US-08-221-817-18	Sequence 18, Appl
170	29	60.4	15281	1	US-08-471-119A-2	Sequence 2, Appl1	243	28	58.3	689	1	US-08-454-439-18	Sequence 18, Appl
171	28	58.3	33	2	US-09-894-882-162	Sequence 162, App	244	28	58.3	689	1	US-09-771-161A-185	Sequence 185, App
172	28	58.3	33	2	US-09-894-882-167	Sequence 167, App	245	28	58.3	689	2	US-09-771-161A-185	Sequence 185, App
173	28	58.3	65	2	US-09-583-110-4320	Sequence 4320, Ap	246	28	58.3	689	4	PCT-US94-10487-18	Sequence 18, Appl

247	28	58.3	694	2	US-09-583-110-4272	Sequence 4272, Ap	320	27	56.2	155	2	US-09-270-767-44959	Sequence 44959, A
248	28	58.3	711	2	US-09-134-000C-5325	Sequence 5325, Ap	321	27	56.2	160	2	US-09-270-767-6531	Sequence 46331, A
249	28	58.3	742	2	US-09-107-532A-6890	Sequence 6890, Ap	322	27	56.2	163	2	US-09-489-847-190	Sequence 190, App
250	28	58.3	764	2	US-07-741-453A-60	Sequence 60, Appl	323	27	56.2	163	2	US-09-270-767-31924	Sequence 31924, A
251	28	58.3	827	2	US-10-101-464A-915	Sequence 915, App	324	27	56.2	163	2	US-09-270-767-47141	Sequence 47141, A
252	28	58.3	882	2	US-09-538-092-1036	Sequence 1036, Ap	325	27	56.2	173	2	US-09-270-767-33020	Sequence 33020, A
253	28	58.3	979	2	US-08-514-213A-2	Sequence 2, Appl1	326	27	56.2	175	2	US-09-248-796A-14111	Sequence 14111, A
254	28	58.3	979	2	US-09-015-399-5	Sequence 5, Appl1	327	27	56.2	178	2	US-09-270-767-62040	Sequence 62040, A
255	28	58.3	1003	2	US-09-949-016-11260	Sequence 11260, A	328	27	56.2	180	2	US-10-166-653-10	Sequence 10, Appl
256	28	58.3	1175	2	US-09-792-024-75	Sequence 75, Appl1	329	27	56.2	181	2	US-09-489-847-337	Sequence 337, App
257	28	58.3	1299	2	US-09-252-991A-31121	Sequence 31121, A	330	27	56.2	185	2	US-09-270-767-39023	Sequence 39023, App
258	28	58.3	1656	2	US-09-949-016-5538	Sequence 7247, Ap	331	27	56.2	200	2	US-09-270-767-54240	Sequence 54240, A
259	28	58.3	1821	2	US-09-949-016-5538	Sequence 5938, Ap	332	27	56.2	223	2	US-09-328-352-7446	Sequence 7446, Ap
260	28	58.3	1833	2	US-08-479-722B-2	Sequence 2, Appl1	333	27	56.2	223	2	US-09-328-352-7447	Sequence 7447, Ap
261	28	58.3	1833	2	US-09-592-685-2	Sequence 2, Appl1	334	27	56.2	228	2	US-09-107-552A-5788	Sequence 42203, A
262	28	58.3	1833	4	PCR-US95-02251-18	Sequence 18, Appl1	335	27	56.2	229	2	US-09-270-767-42203	Sequence 42203, A
263	27.5	57.3	352	2	US-09-902-540-9921	Sequence 9921, Ap	336	27	56.2	234	2	US-09-270-767-58138	Sequence 58138, A
264	27.5	57.3	1182	2	US-09-902-540-9855	Sequence 9855, Ap	337	27	56.2	239	2	US-09-252-991A-16645	Sequence 16645, A
265	27.5	57.3	1371	2	US-09-902-540-16024	Sequence 16024, A	338	27	56.2	241	2	US-08-634-475-7	Sequence 7, Appl1
266	27	56.2	9	2	US-09-258-754-5	Sequence 5, Appl1	339	27	56.2	241	2	US-09-709-791-7	Sequence 7, Appl1
267	27	56.2	9	2	US-09-042-107-5	Sequence 5, Appl1	340	27	56.2	249	2	US-09-134-001C-3910	Sequence 3910, Ap
268	27	56.2	9	2	US-09-722-250D-5	Sequence 5, Appl1	341	27	56.2	252	2	US-09-248-796A-14266	Sequence 14266, A
269	27	56.2	9	2	US-09-676-475A-5	Sequence 5, Appl1	342	27	56.2	254	1	US-07-795-859B-6	Sequence 6, Appl1
270	27	56.2	14	2	US-10-607-595-5	Sequence 5, Appl1	343	27	56.2	254	1	US-08-457-616-6	Sequence 6, Appl1
271	27	56.2	19	2	US-08-682-791B-11	Sequence 11, Appl1	344	27	56.2	266	2	US-09-347-819-10	Sequence 10, Appl
272	27	56.2	20	2	US-08-460-576-15	Sequence 15, Appl1	345	27	56.2	266	2	US-09-627-165E-8	Sequence 8, Appl1
273	27	56.2	21	1	US-08-455-968E-22	Sequence 22, Appl1	346	27	56.2	268	2	US-09-248-796A-19245	Sequence 19245, A
274	27	56.2	25	2	US-09-465-276-4	Sequence 4, Appl1	347	27	56.2	277	2	US-09-949-016-7441	Sequence 7441, Ap
275	27	56.2	35	2	US-09-894-882-159	Sequence 159, App	348	27	56.2	286	2	US-09-248-796A-17939	Sequence 17939, A
276	27	56.2	35	2	US-09-894-882-366	Sequence 366, App	349	27	56.2	289	2	US-09-902-540-12095	Sequence 12095, A
277	27	56.2	51	2	US-09-270-767-37496	Sequence 37496, A	350	27	56.2	291	2	US-09-489-039A-8172	Sequence 8172, Ap
278	27	56.2	51	2	US-09-270-767-40800	Sequence 40800, A	351	27	56.2	296	1	US-08-261-662-2	Sequence 2, Appl1
279	27	56.2	51	2	US-09-270-767-52713	Sequence 52713, A	352	27	56.2	296	4	US-09-489-039A-12254	Sequence 12254, A
280	27	56.2	51	2	US-09-270-767-56016	Sequence 56016, A	353	27	56.2	296	2	PCR-US95-07952-2	Sequence 2, Appl1
281	27	56.2	54	2	US-09-270-767-58589	Sequence 58589, A	354	27	56.2	302	2	US-09-252-991A-18170	Sequence 18170, A
282	27	56.2	58	2	US-09-188-930-311	Sequence 311, App	355	27	56.2	302	2	US-09-543-681A-6863	Sequence 6863, Ap
283	27	56.2	58	2	US-09-312-283C-311	Sequence 311, App	356	27	56.2	303	2	US-09-347-819-6	Sequence 6, Appl1
284	27	56.2	61	2	US-09-832-129-44	Sequence 44, Appl	357	27	56.2	306	2	US-09-489-039A-11858	Sequence 11858, A
285	27	56.2	62	2	US-09-248-796A-23627	Sequence 23627, A	358	27	56.2	309	2	US-09-252-991A-12234	Sequence 59729, A
286	27	56.2	69	2	US-09-621-976-7170	Sequence 17170, Ap	359	27	56.2	311	1	US-09-270-767-59729	Sequence 21, Appl
287	27	56.2	70	2	US-09-774-639-162	Sequence 162, App	360	27	56.2	311	1	US-08-487-826B-23	Sequence 23, Appl
288	27	56.2	72	2	US-09-894-882-158	Sequence 158, App	361	27	56.2	311	1	US-08-568-459A-21	Sequence 21, Appl
289	27	56.2	77	2	US-09-246-500B-14	Sequence 14, Appl	362	27	56.2	311	2	US-08-487-826B-21	Sequence 21, Appl
290	27	56.2	80	2	US-09-248-796A-23402	Sequence 23402, A	363	27	56.2	312	2	US-10-153-273-21	Sequence 21, Appl
291	27	56.2	82	2	US-09-270-767-36699	Sequence 36699, A	364	27	56.2	312	2	US-09-270-767-53094	Sequence 53094, A
292	27	56.2	85	2	US-09-270-767-51916	Sequence 51916, A	365	27	56.2	312	2	US-09-270-767-50311	Sequence 50311, A
293	27	56.2	85	2	US-09-646-403-7	Sequence 7, Appl1	366	27	56.2	313	2	US-09-543-681A-5250	Sequence 5250, Ap
294	27	56.2	91	2	US-09-621-976-4864	Sequence 4864, Ap	367	27	56.2	313	2	US-09-787-351B-11	Sequence 11, Appl
295	27	56.2	92	2	US-09-309-487-22	Sequence 22, Appl1	368	27	56.2	313	2	US-08-568-459A-17	Sequence 17, Appl
296	27	56.2	92	2	US-09-967-808-22	Sequence 22, Appl1	369	27	56.2	324	1	US-08-487-826B-29	Sequence 29, Appl
297	27	56.2	92	2	US-09-390-134B-51	Sequence 51, Appl	370	27	56.2	324	2	US-09-210-288-17	Sequence 17, Appl
298	27	56.2	92	2	US-10-313-994-22	Sequence 22, Appl	371	27	56.2	324	2	US-09-210-288-17	Sequence 17, Appl
299	27	56.2	93	2	US-09-832-129-62	Sequence 62, Appl	372	27	56.2	324	2	US-09-270-767-46326	Sequence 46326, A
300	27	56.2	98	2	US-09-270-767-36106	Sequence 36106, A	373	27	56.2	325	2	US-10-153-273-17	Sequence 17, Appl
301	27	56.2	98	2	US-09-270-767-51323	Sequence 51323, A	374	27	56.2	325	2	US-09-248-796A-35600	Sequence 25600, A
302	27	56.2	99	2	US-08-946-329A-96	Sequence 96, Appl1	375	27	56.2	327	2	US-09-489-039A-10490	Sequence 10490, A
303	27	56.2	99	2	US-09-270-767-60100	Sequence 60100, A	376	27	56.2	333	1	US-08-117-083-65	Sequence 65, Appl
304	27	56.2	99	2	US-09-562-914-96	Sequence 99, Appl1	377	27	56.2	347	1	US-08-118-270-47	Sequence 47, Appl
305	27	56.2	105	2	US-09-288-143-99	Sequence 99, Appl1	378	27	56.2	347	4	US-09-543-681A-5961	Sequence 5961, Ap
306	27	56.2	107	2	US-09-270-767-60409	Sequence 60409, A	379	27	56.2	347	4	PCR-US93-08528-47	Sequence 47, Appl1
307	27	56.2	108	2	US-09-270-767-44934	Sequence 44934, A	380	27	56.2	351	2	US-09-270-767-41311	Sequence 41311, A
308	27	56.2	112	2	US-09-513-999C-5761	Sequence 5761, Ap	381	27	56.2	351	2	US-09-087-013-9	Sequence 9, Appl1
309	27	56.2	117	2	US-09-270-767-57477	Sequence 57477, A	382	27	56.2	357	2	US-09-874-173-26	Sequence 26, Appl1
310	27	56.2	121	2	US-09-270-767-48621	Sequence 48621, A	383	27	56.2	363	2	US-09-787-351B-6	Sequence 6, Appl1
311	27	56.2	121	2	US-09-270-767-61901	Sequence 61901, A	384	27	56.2	364	2	US-08-827-336-2	Sequence 2, Appl1
312	27	56.2	123	2	US-09-520-781-26	Sequence 26, Appl1	385	27	56.2	364	2	US-09-357-905-2	Sequence 2, Appl1
313	27	56.2	123	2	US-09-957-187-26	Sequence 26, Appl1	386	27	56.2	364	2	US-10-117-178-2	Sequence 12725, A
314	27	56.2	130	2	US-09-591-053-26	Sequence 26, Appl1	387	27	56.2	368	2	US-09-902-540-12725	Sequence 4389, Ap
315	27	56.2	140	2	US-09-347-819-8	Sequence 8, Appl1	388	27	56.2	371	2	US-09-543-681A-3389	Sequence 8955, Ap
316	27	56.2	140	2	US-09-252-991A-16605	Sequence 16605, A	389	27	56.2	374	2	US-09-489-039A-9955	Sequence 4, Appl1
317	27	56.2	141	2	US-09-252-991A-24542	Sequence 24542, A	390	27	56.2	376	1	US-08-464-148-4	Sequence 4, Appl1
318	27	56.2	141	2	US-10-141-645-72	Sequence 72, Appl1	391	27	56.2	376	1	US-08-385-500-4	Sequence 4, Appl1
319	27	56.2	141	2	US-10-141-645-73	Sequence 73, Appl1	392	27	56.2	376	1		

393	27	56.2	376	1	US-08-846-784-4	Sequence 4, Appli	466	27	56.2	604	1	US-08-224-657-84	Sequence 84, Appli
394	27	56.2	377	1	US-08-455-968E-3	Sequence 3, Appli	467	27	56.2	604	1	US-08-224-657-95	Sequence 95, Appli
395	27	56.2	378	1	US-08-455-968E-10	Sequence 10, Appli	468	27	56.2	604	1	US-08-224-657-88	Sequence 88, Appli
396	27	56.2	378	1	US-08-823-516-138	Sequence 138, App	469	27	56.2	604	2	US-09-354-138-84	Sequence 84, Appli
397	27	56.2	378	2	US-09-940-244-138	Sequence 138, App	470	27	56.2	604	2	US-09-354-138-95	Sequence 95, Appli
398	27	56.2	378	2	US-09-381-212-138	Sequence 138, App	471	27	56.2	604	2	US-09-354-138-98	Sequence 98, Appli
399	27	56.2	378	2	US-09-713-601A-138	Sequence 138, App	472	27	56.2	637	2	US-09-187-906-7	Sequence 7, Appli
400	27	56.2	379	2	US-09-426-557-2	Sequence 2, Appli	473	27	56.2	637	2	US-09-489-407-7	Sequence 7, Appli
401	27	56.2	379	2	US-09-426-557-4	Sequence 4, Appli	474	27	56.2	638	2	US-09-811-469-9	Sequence 9, Appli
402	27	56.2	379	2	US-09-426-557-6	Sequence 6, Appli	475	27	56.2	638	2	US-10-370-659-9	Sequence 9, Appli
403	27	56.2	379	2	US-09-426-557-8	Sequence 8, Appli	476	27	56.2	640	2	US-10-104-047-3268	Sequence 3268, Ap
404	27	56.2	380	1	US-08-455-968E-1	Sequence 1, Appli	477	27	56.2	640	2	US-09-270-767-44307	Sequence 44307, A
405	27	56.2	380	1	US-08-823-516-137	Sequence 137, App	478	27	56.2	669	2	US-09-361-631-7	Sequence 7, Appli
406	27	56.2	380	2	US-09-426-557-10	Sequence 10, Appli	479	27	56.2	669	2	US-09-345-473E-27	Sequence 27, Appli
407	27	56.2	380	2	US-09-940-244-137	Sequence 137, App	480	27	56.2	669	2	US-09-862-007-27	Sequence 27, Appli
408	27	56.2	380	2	US-09-949-016-6456	Sequence 6456, Ap	481	27	56.2	670	2	US-09-944-016-11135	Sequence 11135, A
409	27	56.2	380	2	US-09-381-212-137	Sequence 137, App	482	27	56.2	672	2	US-09-902-540-14283	Sequence 14283, A
410	27	56.2	381	2	US-09-713-601A-137	Sequence 137, App	483	27	56.2	675	2	US-08-426-509A-4	Sequence 4, Appli
411	27	56.2	381	2	US-09-602-777A-316	Sequence 316, App	484	27	56.2	675	2	US-08-233-545-4	Sequence 4, Appli
412	27	56.2	382	1	US-08-455-968E-5	Sequence 5, Appli	485	27	56.2	675	2	US-09-977-261-4	Sequence 4, Appli
413	27	56.2	382	1	US-08-823-516-139	Sequence 139, App	486	27	56.2	675	4	PCT-US95-05008-4	Sequence 4, Appli
414	27	56.2	382	2	US-09-940-244-139	Sequence 139, App	487	27	56.2	699	2	US-08-274-111B-6	Sequence 6, Appli
415	27	56.2	382	2	US-09-381-212-139	Sequence 139, App	488	27	56.2	714	2	US-09-438-185A-601	Sequence 601, App
416	27	56.2	382	2	US-09-713-601A-139	Sequence 139, App	489	27	56.2	724	2	US-09-328-352-7710	Sequence 7710, Ap
417	27	56.2	389	6	5447867-4	Patent No. 5447867	490	27	56.2	746	2	US-09-248-796A-17272	Sequence 17272, A
418	27	56.2	392	2	US-09-248-796A-23011	Sequence 23011, A	491	27	56.2	751	2	US-10-415-147-2	Sequence 2, Appli
419	27	56.2	393	1	US-07-629-1041-3	Sequence 3, Appli	492	27	56.2	763	1	US-08-889-711-2	Sequence 2, Appli
420	27	56.2	398	1	US-08-288-663A-1	Sequence 1, Appli	493	27	56.2	763	2	US-09-188-825-2	Sequence 2, Appli
421	27	56.2	398	1	US-08-288-663A-15	Sequence 15, Appli	494	27	56.2	763	2	US-09-583-110-7773	Sequence 3773, Ap
422	27	56.2	401	2	US-09-270-767-44648	Sequence 44648, A	495	27	56.2	776	2	US-09-107-433-3635	Sequence 3635, Ap
423	27	56.2	407	2	US-09-270-767-39108	Sequence 39108, A	496	27	56.2	782	2	US-09-252-991A-21554	Sequence 21554, A
424	27	56.2	407	2	US-09-270-767-54325	Sequence 54325, A	497	27	56.2	823	1	US-07-745-206A-15	Sequence 15, Appli
425	27	56.2	409	2	US-09-949-016-10774	Sequence 10774, A	498	27	56.2	823	1	US-08-311-363-15	Sequence 15, Appli
426	27	56.2	413	2	US-09-543-681A-6035	Sequence 6035, Ap	499	27	56.2	829	2	US-09-438-185A-943	Sequence 943, App
427	27	56.2	413	2	US-09-902-540-15569	Sequence 15569, A	500	27	56.2	839	2	US-09-897-477A-4	Sequence 47, Appli
428	27	56.2	419	2	US-09-543-681A-4221	Sequence 4221, Ap	501	27	56.2	844	2	US-09-422-936-47	Sequence 47, Appli
429	27	56.2	423	2	US-09-288-326A-8	Sequence 8, Appli	502	27	56.2	844	2	US-09-422-936-51	Sequence 51, Appli
430	27	56.2	423	2	US-09-548-409B-8	Sequence 8, Appli	503	27	56.2	848	2	US-09-719-085A-4	Sequence 4, Appli
431	27	56.2	429	2	US-09-219-865B-4	Sequence 4, Appli	504	27	56.2	848	2	US-10-360-101-219	Sequence 219, App
432	27	56.2	429	2	US-09-219-865B-12	Sequence 12, Appli	505	27	56.2	857	2	US-09-944-016-6819	Sequence 6819, Ap
433	27	56.2	430	2	US-09-134-001C-4712	Sequence 4712, Ap	506	27	56.2	871	2	US-09-255-829-2	Sequence 2, Appli
434	27	56.2	443	2	US-09-543-681A-5452	Sequence 5452, Ap	507	27	56.2	871	2	US-09-255-829-8	Sequence 8, Appli
435	27	56.2	446	2	US-09-328-352-7524	Sequence 7524, Ap	508	27	56.2	871	2	US-09-255-829-26	Sequence 26, Appli
436	27	56.2	448	2	US-09-252-991A-24213	Sequence 24213, A	509	27	56.2	873	2	US-09-255-829-6	Sequence 6, Appli
437	27	56.2	448	2	US-09-583-110-3993	Sequence 3993, Ap	510	27	56.2	875	2	US-09-255-829-10	Sequence 10, Appli
438	27	56.2	462	2	US-09-857-524B-4	Sequence 4, Appli	511	27	56.2	878	2	US-08-941-936-2	Sequence 2, Appli
439	27	56.2	469	2	US-09-328-352-5007	Sequence 5007, Ap	512	27	56.2	878	2	US-09-255-829-12	Sequence 12, Appli
440	27	56.2	473	2	US-09-270-767-37633	Sequence 37633, A	513	27	56.2	886	2	US-09-422-936-77	Sequence 77, Appli
441	27	56.2	473	2	US-09-270-767-52850	Sequence 52850, A	514	27	56.2	892	2	US-09-422-936-75	Sequence 75, Appli
442	27	56.2	475	2	US-09-927-811D-7	Sequence 7, Appli	515	27	56.2	894	2	US-09-255-829-4	Sequence 4, Appli
443	27	56.2	477	2	US-09-252-991A-16778	Sequence 16778, A	516	27	56.2	894	1	US-08-465-995A-2	Sequence 2, Appli
444	27	56.2	480	2	US-09-248-796A-17167	Sequence 17167, A	517	27	56.2	898	1	US-08-465-995A-4	Sequence 4, Appli
445	27	56.2	481	2	US-09-107-433-4906	Sequence 4906, Ap	518	27	56.2	898	1	US-08-465-994C-2	Sequence 2, Appli
446	27	56.2	481	2	US-09-198-452A-1012	Sequence 1012, Ap	519	27	56.2	898	1	US-08-465-994C-4	Sequence 4, Appli
447	27	56.2	482	2	US-09-902-540-11192	Sequence 11192, A	520	27	56.2	898	1	US-08-966-145-2	Sequence 2, Appli
448	27	56.2	488	2	US-08-985-343-1	Sequence 1, Appli	521	27	56.2	898	1	US-08-966-145-2	Sequence 2, Appli
449	27	56.2	495	1	US-07-841-997A-2	Sequence 2, Appli	522	27	56.2	898	1	US-08-966-145-4	Sequence 4, Appli
450	27	56.2	495	1	US-08-290-301-2	Sequence 2, Appli	523	27	56.2	899	2	US-09-422-936-71	Sequence 71, Appli
451	27	56.2	495	1	US-08-588-983-2	Sequence 2, Appli	524	27	56.2	907	2	US-09-255-829-16	Sequence 16, Appli
452	27	56.2	495	1	US-08-588-976-2	Sequence 2, Appli	525	27	56.2	920	1	US-08-101-593-4	Sequence 4, Appli
453	27	56.2	495	2	US-09-013-598-2	Sequence 2, Appli	526	27	56.2	920	1	US-08-101-593-4	Sequence 4, Appli
454	27	56.2	495	2	US-08-985-343-2	Sequence 2, Appli	527	27	56.2	921	1	US-08-568-459A-8	Sequence 8, Appli
455	27	56.2	508	2	US-09-489-039A-7402	Sequence 7402, Ap	528	27	56.2	921	1	US-08-487-896B-8	Sequence 8, Appli
456	27	56.2	517	2	US-08-985-343-3	Sequence 3, Appli	529	27	56.2	921	2	US-09-210-288-8	Sequence 8, Appli
457	27	56.2	522	2	US-09-198-452A-480	Sequence 480, App	530	27	56.2	921	2	US-10-153-273-14	Sequence 14, Appli
458	27	56.2	529	2	US-09-134-000C-4524	Sequence 4524, Ap	531	27	56.2	953	2	US-09-255-829-18	Sequence 18, Appli
459	27	56.2	530	2	US-09-199-637A-130	Sequence 130, App	532	27	56.2	960	2	US-09-422-936-45	Sequence 45, Appli
460	27	56.2	537	2	US-09-252-991A-29592	Sequence 29592, A	533	27	56.2	961	2	US-09-422-936-49	Sequence 49, Appli
461	27	56.2	539	2	US-09-552-991A-24784	Sequence 24784, A	534	27	56.2	961	2	US-09-914-259-14	Sequence 14, Appli
462	27	56.2	554	2	US-08-904-871-1	Sequence 1, Appli	535	27	56.2	969	2	US-09-252-991A-23580	Sequence 23580, A
463	27	56.2	554	2	US-09-422-936-79	Sequence 79, Appli	536	27	56.2	972	2	US-09-489-039A-11867	Sequence 11867, A
464	27	56.2	571	2	US-09-999-833A-132	Sequence 132, App	537	27	56.2	975	2	US-09-695-461-4	Sequence 4, Appli
465	27	56.2	571	2	US-10-020-445A-132	Sequence 132, App	538	27	56.2	985	2	US-09-248-796A-16090	Sequence 16090, A

539	27	56.2	989	2	US-09-110-517-4	Sequence 4, Appl1	612	27	56.2	2710	1	US-08-487-826B-12	Sequence 12, Appl1
540	27	56.2	1001	2	US-10-415-147-3	Sequence 3, Appl1	613	27	56.2	2710	2	US-09-210-288-12	Sequence 12, Appl1
541	27	56.2	1006	2	US-10-415-147-12	Sequence 12, Appl1	614	27	56.2	2710	2	US-10-153-273-12	Sequence 12, Appl1
542	27	56.2	1013	2	US-09-415-522-8	Sequence 8, Appl1	615	27	56.2	2713	4	PCT-US96-01735-1	Sequence 1, Appl1
543	27	56.2	1013	2	US-09-255-829-18	Sequence 18, Appl1	616	27	56.2	2972	2	US-08-469-260A-387	Sequence 387, App
544	27	56.2	1049	1	US-08-817-090B-2	Sequence 2, Appl1	617	27	56.2	2972	2	US-08-488-446-387	Sequence 387, App
545	27	56.2	1050	1	US-08-817-090B-4	Sequence 4, Appl1	618	27	56.2	2972	2	US-08-467-344A-387	Sequence 387, App
546	27	56.2	1078	1	US-08-485-588-7	Sequence 7, Appl1	619	27	56.2	2972	2	US-08-424-550B-387	Sequence 387, App
547	27	56.2	1078	1	US-08-484-565-7	Sequence 7, Appl1	620	27	56.2	3060	1	US-08-487-826B-14	Sequence 14, Appl1
548	27	56.2	1078	1	US-08-480-751-7	Sequence 7, Appl1	621	27	56.2	122	2	US-08-248-796A-23644	Sequence 16, Appl1
549	27	56.2	1078	1	US-08-943-986-7	Sequence 7, Appl1	622	26.5	55.2	561	1	US-08-221-817-16	Sequence 16, Appl1
550	27	56.2	1078	2	US-08-353-784-7	Sequence 7, Appl1	623	26.5	55.2	561	1	US-08-454-439-16	Sequence 16, Appl1
551	27	56.2	1078	2	US-08-484-719B-7	Sequence 7, Appl1	624	26.5	55.2	561	4	PCT-US94-10487-16	Sequence 105, App
552	27	56.2	1078	2	US-08-484-159-7	Sequence 7, Appl1	625	26	54.2	12	1	US-08-752-882A-105	Sequence 48, Appl1
553	27	56.2	1079	1	US-08-485-588-8	Sequence 8, Appl1	626	26	54.2	14	2	US-09-620-091-83	Sequence 83, Appl1
554	27	56.2	1079	1	US-08-484-565-8	Sequence 8, Appl1	627	26	54.2	16	2	US-09-962-756-743	Sequence 743, App
555	27	56.2	1079	1	US-08-480-751-8	Sequence 8, Appl1	628	26	54.2	20	2	US-09-687-477-20	Sequence 20, Appl1
556	27	56.2	1079	1	US-08-943-986-8	Sequence 8, Appl1	629	26	54.2	22	2	US-09-687-476-20	Sequence 20, Appl1
557	27	56.2	1079	2	US-08-353-784-8	Sequence 8, Appl1	630	26	54.2	22	2	US-09-687-372-20	Sequence 20, Appl1
558	27	56.2	1079	2	US-08-484-159-8	Sequence 8, Appl1	631	26	54.2	22	2	US-09-975-553-20	Sequence 20, Appl1
559	27	56.2	1079	2	US-08-484-719B-8	Sequence 8, Appl1	632	26	54.2	22	2	US-10-270-795-20	Sequence 20, Appl1
560	27	56.2	1085	1	US-08-485-588-5	Sequence 5, Appl1	633	26	54.2	22	2	US-10-270-876-20	Sequence 20, Appl1
561	27	56.2	1085	1	US-08-484-565-5	Sequence 5, Appl1	634	26	54.2	22	2	US-10-268-051-10	Sequence 25, Appl1
562	27	56.2	1085	1	US-08-480-751-5	Sequence 5, Appl1	635	26	54.2	22	2	US-10-411-076-25	Sequence 25, Appl1
563	27	56.2	1085	2	US-08-943-986-5	Sequence 5, Appl1	636	26	54.2	22	2	US-10-125-772-25	Sequence 25, Appl1
564	27	56.2	1085	2	US-08-353-784-5	Sequence 5, Appl1	637	26	54.2	22	2	US-10-125-772-25	Sequence 25, Appl1
565	27	56.2	1085	2	US-08-484-719B-5	Sequence 5, Appl1	638	26	54.2	23	2	US-09-162-021B-13	Sequence 221, App
566	27	56.2	1088	1	US-08-485-588-6	Sequence 6, Appl1	639	26	54.2	23	2	US-09-177-249-221	Sequence 221, App
567	27	56.2	1088	1	US-08-484-565-6	Sequence 6, Appl1	640	26	54.2	25	2	US-09-812-283-221	Sequence 25, Appl1
568	27	56.2	1088	1	US-08-480-751-6	Sequence 6, Appl1	641	26	54.2	30	1	US-08-152-721B-25	Sequence 18, Appl1
569	27	56.2	1088	1	US-08-943-986-6	Sequence 6, Appl1	642	26	54.2	43	2	US-09-106-568E-18	Sequence 57, Appl1
570	27	56.2	1088	2	US-08-353-784-6	Sequence 6, Appl1	643	26	54.2	47	2	US-09-105-568E-17	Sequence 294, App
571	27	56.2	1088	2	US-08-484-719B-6	Sequence 6, Appl1	644	26	54.2	47	2	US-10-178-213-294	Sequence 294, App
572	27	56.2	1088	2	US-08-484-159-6	Sequence 6, Appl1	645	26	54.2	47	2	US-10-178-213-315	Sequence 315, App
573	27	56.2	1098	2	US-10-104-047-2475	Sequence 2475, Ap	646	26	54.2	51	2	US-09-640-211A-891	Sequence 891, App
574	27	56.2	1098	2	US-08-916-917-14	Sequence 14, Appl1	647	26	54.2	51	2	US-09-513-999C-4638	Sequence 4638, App
575	27	56.2	1101	1	US-09-225-170-14	Sequence 14, Appl1	648	26	54.2	53	2	US-09-621-976-6124	Sequence 6124, Ap
576	27	56.2	1101	2	US-09-252-991A-22872	Sequence 22872, A	649	26	54.2	53	2	US-09-270-767-40143	Sequence 40143, Ap
577	27	56.2	1161	2	US-08-687-289A-6	Sequence 6, Appl1	650	26	54.2	53	2	US-09-509-902A-8	Sequence 7739, Ap
578	27	56.2	1219	2	US-09-435-897-6	Sequence 6, Appl1	651	26	54.2	53	2	US-09-543-681A-7739	Sequence 26442, A
579	27	56.2	1219	2	US-09-198-452A-704	Sequence 704, App	652	26	54.2	58	2	US-09-082-358B-82	Sequence 82, Appl1
580	27	56.2	1243	2	US-09-438-185A-668	Sequence 668, App	653	26	54.2	60	2	US-09-513-999C-6864	Sequence 6864, Ap
581	27	56.2	1243	2	US-08-444-623-2	Sequence 2, Appl1	654	26	54.2	61	2	US-09-540-236-3297	Sequence 3297, Ap
582	27	56.2	1271	1	US-08-471-869-2	Sequence 2, Appl1	655	26	54.2	67	2	US-09-902-540-9940	Sequence 9940, Ap
583	27	56.2	1271	1	US-08-471-869-2	Sequence 2, Appl1	656	26	54.2	67	2	US-09-248-796A-24950	Sequence 24950, A
584	27	56.2	1271	2	US-09-342-563-2	Sequence 2, Appl1	657	26	54.2	70	1	US-08-166-316-3	Sequence 22363, A
585	27	56.2	1271	2	PCT-US94-08267-2	Sequence 2, Appl1	658	26	54.2	73	2	US-09-509-902A-8	Sequence 7739, Ap
586	27	56.2	1296	1	US-08-480-604A-28	Sequence 28, Appl1	659	26	54.2	73	2	US-08-463-224-3	Sequence 8, Appl1
587	27	56.2	1296	1	US-08-405-496A-28	Sequence 28, Appl1	660	26	54.2	73	2	US-10-024-828-8	Sequence 3, Appl1
588	27	56.2	1296	2	US-08-915-136-28	Sequence 28, Appl1	661	26	54.2	73	2	US-08-463-377-3	Sequence 3, Appl1
589	27	56.2	1296	2	US-09-084-517-28	Sequence 28, Appl1	662	26	54.2	74	1	US-09-246-500B-11	Sequence 11, Appl1
590	27	56.2	1411	2	US-09-252-991A-28408	Sequence 28408, A	663	26	54.2	74	2	US-09-387-671-3	Sequence 3, Appl1
591	27	56.2	1528	1	US-08-463-092B-6	Sequence 6, Appl1	664	26	54.2	74	2	US-09-651-685-3	Sequence 356, App
592	27	56.2	1528	1	US-08-460-907A-6	Sequence 6, Appl1	665	26	54.2	74	2	US-10-178-213-356	Sequence 5295, Ap
593	27	56.2	1528	2	US-08-463-179A-6	Sequence 6, Appl1	666	26	54.2	74	2	US-09-370-767-59937	Sequence 59937, A
594	27	56.2	1528	2	US-08-463-179A-6	Sequence 6, Appl1	667	26	54.2	78	2	US-09-513-999C-443	Sequence 443, Ap
595	27	56.2	1528	2	US-08-463-179A-6	Sequence 6, Appl1	668	26	54.2	78	2	US-10-178-213-314	Sequence 314, App
596	27	56.2	1528	2	US-08-463-179A-6	Sequence 6, Appl1	669	26	54.2	78	2	US-09-471-276-829	Sequence 829, App
597	27	56.2	1754	1	US-07-745-206A-13	Sequence 13, Appl1	670	26	54.2	79	2	US-10-178-213-293	Sequence 293, App
598	27	56.2	1754	1	US-08-311-363-13	Sequence 13, Appl1	671	26	54.2	80	1	US-07-971-160-14	Sequence 14, Appl1
599	27	56.2	2210	2	US-09-309-572-7	Sequence 7, Appl1	672	26	54.2	80	1	US-08-336-241-14	Sequence 14, Appl1
600	27	56.2	2210	2	US-09-718-096-7	Sequence 7, Appl1	673	26	54.2	80	1	US-09-119-024-14	Sequence 14, Appl1
601	27	56.2	2237	1	US-08-455-543A-48	Sequence 48, Appl1	674	26	54.2	80	1	US-08-465-273-14	Sequence 14, Appl1
602	27	56.2	2237	1	US-08-223-305C-48	Sequence 8, Appl1	675	26	54.2	80	1	US-09-119-024-14	Sequence 14, Appl1
603	27	56.2	2237	2	US-09-268-163-8	Sequence 8, Appl1	676	26	54.2	80	1	US-08-417-226-14	Sequence 14, Appl1
604	27	56.2	2237	2	US-08-713-118-2	Sequence 2, Appl1	677	26	54.2	80	2	US-09-196-133-14	Sequence 14, Appl1
605	27	56.2	2237	2	US-09-452-007-2	Sequence 47, Appl1	678	26	54.2	80	2	US-08-643-732-14	Sequence 14, Appl1
606	27	56.2	2239	1	US-08-455-543A-47	Sequence 47, Appl1	679	26	54.2	80	2	US-09-836-169-14	Sequence 14, Appl1
607	27	56.2	2339	1	US-08-223-305C-47	Sequence 47, Appl1	680	26	54.2	80	2		
608	27	56.2	2339	2	US-09-268-163-6	Sequence 6, Appl1	681	26	54.2	80	2		
609	27	56.2	2339	2	US-09-268-163-6	Sequence 6, Appl1	682	26	54.2	80	2		
610	27	56.2	2339	2	US-09-268-163-6	Sequence 6, Appl1	683	26	54.2	80	2		
611	27	56.2	2710	1	US-08-568-459A-12	Sequence 12, Appl1	684	26	54.2	80	2		

685	26	54.2	80	2	US-09-244-130-14	Sequence 14, Appl	758	26	54.2	212	2	US-09-270-767-32266	Sequence 32266, A
686	26	53.2	80	2	US-09-492-697-14	Sequence 14, Appl	759	26	54.2	212	2	US-09-270-767-47483	Sequence 47483, A
687	26	53.2	89	2	US-09-513-999C-7333	Sequence 7333, Ap	760	26	54.2	216	2	US-09-443-184-57	Sequence 57, Appl
688	26	51.2	97	2	US-09-248-796A-16604	Sequence 16604, A	761	26	54.2	218	2	US-09-386-493-7	Sequence 7, Appl
689	26	54.2	100	2	US-09-270-767-32986	Sequence 32986, A	762	26	54.2	219	1	US-08-925-708-2	Sequence 2, Appl
690	26	54.2	100	2	US-09-270-767-48203	Sequence 48203, A	763	26	54.2	224	2	US-09-198-452A-892	Sequence 892, App
691	26	54.2	103	2	US-09-543-681A-7939	Sequence 7939, Ap	764	26	54.2	224	2	US-10-012-819-774	Sequence 274, App
692	26	54.2	104	2	US-09-134-001C-4716	Sequence 4716, Ap	765	26	54.2	228	2	US-08-911-423-6	Sequence 6, Appl
693	26	53.2	109	2	US-09-248-796A-21989	Sequence 21989, A	766	26	54.2	228	2	US-09-886-319A-45	Sequence 45, Appl
694	26	54.2	111	2	US-10-104-047-3918	Sequence 3918, Ap	767	26	54.2	232	2	US-08-911-423-7	Sequence 7, Appl
695	26	54.2	114	2	US-09-270-767-36269	Sequence 36269, A	768	26	54.2	234	2	US-09-512-363-2	Sequence 2, Appl
696	26	54.2	114	2	US-09-270-767-42187	Sequence 42187, A	769	26	54.2	234	2	US-09-176-200-2	Sequence 2, Appl
697	26	54.2	114	2	US-09-270-767-51486	Sequence 51486, A	770	26	54.2	234	2	US-09-915-593-2	Sequence 2, Appl
698	26	54.2	114	2	US-09-270-767-61542	Sequence 61542, A	771	26	54.2	237	2	US-09-655-270A-19	Sequence 19, Appl
699	26	54.2	115	2	US-09-640-211A-757	Sequence 757, App	772	26	54.2	237	2	US-09-651-941-23	Sequence 23, Appl
700	26	54.2	116	2	US-09-621-976-7212	Sequence 7212, Ap	773	26	54.2	237	2	US-09-955-597-23	Sequence 23, Appl
701	26	54.2	118	2	US-09-245-041-127	Sequence 127, App	774	26	54.2	238	2	US-08-634-475-6	Sequence 6, Appl
702	26	54.2	118	2	US-09-358-055B-128	Sequence 128, App	775	26	54.2	238	2	US-09-709-791-6	Sequence 6, Appl
703	26	54.2	118	2	US-09-893-238-127	Sequence 127, App	776	26	54.2	239	2	US-09-270-767-51169	Sequence 41169, A
704	26	54.2	120	2	US-09-270-767-31866	Sequence 31866, A	777	26	54.2	239	2	US-09-270-767-56385	Sequence 56385, A
705	26	54.2	120	2	US-09-270-767-47083	Sequence 47083, A	778	26	54.2	240	2	US-09-512-363-6	Sequence 6, Appl
706	26	54.2	120	2	US-09-248-796A-24260	Sequence 24260, A	779	26	54.2	240	2	US-09-176-200-6	Sequence 6, Appl
707	26	54.2	123	2	US-09-248-796A-16926	Sequence 16926, A	780	26	54.2	240	2	US-09-915-593-6	Sequence 6, Appl
708	26	54.2	124	2	US-09-513-999C-6026	Sequence 6026, Ap	781	26	54.2	241	2	US-08-911-423-4	Sequence 4, Appl
709	26	54.2	125	2	US-09-270-767-35295	Sequence 35295, A	782	26	54.2	241	2	US-09-512-363-28	Sequence 28, Appl
710	26	54.2	125	2	US-09-270-767-50512	Sequence 50512, A	783	26	54.2	241	2	US-09-134-000C-6347	Sequence 6347, Ap
711	26	54.2	128	2	US-09-270-767-42692	Sequence 42692, A	784	26	54.2	241	2	US-09-915-593-28	Sequence 28, Appl
712	26	54.2	130	2	US-09-270-767-58101	Sequence 58101, A	785	26	54.2	241	2	US-09-949-016-7232	Sequence 7232, Ap
713	26	54.2	131	2	US-09-270-767-62248	Sequence 62248, A	786	26	54.2	251	2	US-09-902-540-10049	Sequence 10049, Ap
714	26	54.2	134	2	US-09-270-767-41316	Sequence 41316, A	787	26	54.2	252	2	US-09-252-991A-27663	Sequence 27663, A
715	26	54.2	134	2	US-09-270-767-56532	Sequence 56532, A	788	26	54.2	252	2	US-09-270-767-41080	Sequence 41080, A
716	26	54.2	136	2	US-09-583-110-3645	Sequence 3645, Ap	789	26	54.2	252	2	US-09-270-767-56296	Sequence 56296, A
717	26	54.2	136	2	US-09-270-767-36154	Sequence 36154, A	790	26	54.2	254	2	US-09-270-767-57385	Sequence 57385, A
718	26	54.2	136	2	US-09-270-767-40567	Sequence 40567, A	791	26	54.2	256	2	US-09-215-664-4	Sequence 4, Appl
719	26	54.2	136	2	US-09-270-767-51371	Sequence 51371, A	792	26	54.2	256	2	US-09-252-991A-17168	Sequence 17168, A
720	26	54.2	136	2	US-09-270-767-55783	Sequence 55783, A	793	26	54.2	256	2	US-09-328-352-7827	Sequence 7827, Ap
721	26	54.2	144	2	US-09-931-381A-14	Sequence 14, Appl	794	26	54.2	256	2	US-10-109-310-4	Sequence 4, Appl
722	26	54.2	144	2	US-10-039-659A-2	Sequence 2, Appl	795	26	54.2	260	2	US-09-162-021B-4	Sequence 4, Appl
723	26	54.2	146	2	US-09-530-880-6	Sequence 6, Appl	796	26	54.2	265	1	US-08-211-312-7	Sequence 7, Appl
724	26	54.2	155	2	US-09-107-433-3117	Sequence 3117, Ap	797	26	54.2	265	2	US-08-472-285-7	Sequence 7, Appl
725	26	54.2	157	2	US-09-492-709A-374	Sequence 374, App	798	26	54.2	265	2	US-08-472-285-7	Sequence 7, Appl
726	26	54.2	159	2	US-09-248-796A-23065	Sequence 23065, A	799	26	54.2	269	2	US-09-270-767-61461	Sequence 61461, A
727	26	54.2	166	2	US-09-213-293D-18	Sequence 18, Appl	800	26	54.2	273	2	US-08-482-918-53	Sequence 53, Appl
728	26	54.2	167	2	US-09-270-767-35863	Sequence 35863, A	801	26	54.2	273	2	US-09-635-251-53	Sequence 53, Appl
729	26	54.2	167	2	US-09-270-767-51080	Sequence 51080, A	802	26	54.2	273	2	US-09-813-453B-10	Sequence 10, Appl
730	26	54.2	168	1	US-08-193-977-9	Sequence 9, Appl	803	26	54.2	273	2	US-09-224-663-53	Sequence 53, Appl
731	26	54.2	168	1	US-09-270-767-45066	Sequence 45066, A	804	26	54.2	273	2	US-09-604-335A-53	Sequence 53, Appl
732	26	54.2	173	2	US-09-248-796A-20919	Sequence 20919, A	805	26	54.2	273	2	US-08-336-728A-53	Sequence 53, Appl
733	26	54.2	177	2	US-09-328-352-6091	Sequence 6091, Ap	806	26	54.2	275	2	US-09-489-039A-8831	Sequence 8831, Ap
734	26	54.2	177	2	US-09-149-476-565	Sequence 565, App	807	26	54.2	275	2	US-09-270-767-57659	Sequence 57659, A
735	26	54.2	179	2	US-09-328-352-4542	Sequence 4542, Ap	808	26	54.2	275	2	US-09-902-540-14571	Sequence 14571, A
736	26	54.2	180	2	US-10-104-047-3076	Sequence 3076, Ap	809	26	54.2	275	2	US-09-270-767-59761	Sequence 59761, A
737	26	54.2	186	2	US-09-270-767-42788	Sequence 42788, A	810	26	54.2	288	2	US-09-543-661A-6091	Sequence 6091, Ap
738	26	54.2	189	2	US-10-012-231A-8	Sequence 8, Appl	811	26	54.2	288	2	US-09-270-767-59761	Sequence 59761, A
739	26	54.2	189	2	US-10-015-389A-8	Sequence 8, Appl	812	26	54.2	292	2	US-09-270-767-53931	Sequence 53931, A
740	26	54.2	189	2	US-10-006-768A-8	Sequence 8, Appl	813	26	54.2	292	2	US-09-107-443-5103	Sequence 5103, Ap
741	26	54.2	189	2	US-10-015-671A-8	Sequence 8, Appl	814	26	54.2	293	2	US-08-147-552A-12	Sequence 12, Appl
742	26	54.2	189	2	US-10-015-933A-8	Sequence 8, Appl	815	26	54.2	293	2	US-08-292-694A-12	Sequence 12, Appl
743	26	54.2	189	2	US-10-011-833A-8	Sequence 8, Appl	816	26	54.2	295	2	US-09-252-991A-22449	Sequence 22449, A
744	26	54.2	189	2	US-10-006-041A-8	Sequence 8, Appl	817	26	54.2	296	2	US-09-543-661A-6091	Sequence 6091, Ap
745	26	54.2	189	2	US-10-012-064A-8	Sequence 8, Appl	818	26	54.2	296	2	US-09-270-767-59761	Sequence 59761, A
746	26	54.2	197	2	US-09-886-319A-81	Sequence 81, Appl	819	26	54.2	296	2	US-09-270-767-5499	Sequence 5499, Ap
747	26	54.2	204	1	US-08-652-859-2	Sequence 2, Appl	820	26	54.2	299	2	US-09-543-661A-5582	Sequence 5582, Ap
748	26	54.2	204	1	US-08-919-706-2	Sequence 2, Appl	821	26	54.2	304	2	US-09-248-796A-20845	Sequence 20845, A
749	26	54.2	204	1	US-09-153-751-2	Sequence 2, Appl	822	26	54.2	304	2	US-09-270-767-59320	Sequence 59320, A
750	26	54.2	204	1	US-09-886-319A-38	Sequence 38, Appl	823	26	54.2	308	2	US-09-489-039A-9072	Sequence 9072, Ap
751	26	54.2	206	2	US-09-169-787-145	Sequence 145, App	824	26	54.2	310	2	US-09-270-767-42373	Sequence 42373, A
752	26	54.2	207	2	US-09-438-185A-832	Sequence 832, App	825	26	54.2	311	2	US-08-911-423-8	Sequence 8, Appl
753	26	54.2	207	2	US-10-172-527A-33	Sequence 33, Appl	826	26	54.2	311	2	US-08-592-126-13	Sequence 143, App
754	26	54.2	207	2	US-10-172-527A-34	Sequence 34, Appl	827	26	54.2	321	1	US-09-168-595-13	Sequence 143, App
755	26	54.2	207	2	US-10-172-527A-35	Sequence 35, Appl	828	26	54.2	321	2	US-09-328-352-5024	Sequence 5024, Ap
756	26	54.2	207	2	US-10-172-527A-36	Sequence 36, Appl	829	26	54.2	322	2	US-09-292-858B-22	Sequence 22, Appl
757	26	54.2	207	2	US-10-172-527A-37	Sequence 37, Appl	830	26	54.2	323	2		

831	26	54.2	323	2	US-09-252-991A-19242	Sequence 19242, A	904	26	54.2	398	2	US-09-351-198-3	Sequence 3, Appl1
832	26	54.2	329	2	US-09-328-352-6272	Sequence 6272, Ap	905	26	54.2	398	2	US-09-113-426-3	Sequence 3, Appl1
833	26	54.2	330	1	US-08-454-549-5	Sequence 5, Appl1	906	26	54.2	398	2	US-08-405-271A-16	Sequence 16, Appl1
834	26	54.2	330	2	US-08-454-552-5	Sequence 5, Appl1	907	26	54.2	398	2	US-09-761-962A-39	Sequence 29, Appl1
835	26	54.2	333	2	US-09-463-702A-39	Sequence 39, Appl1	908	26	54.2	398	2	US-09-214-904-2	Sequence 2, Appl1
836	26	54.2	333	2	US-09-699-135-39	Sequence 39, Appl1	909	26	54.2	398	4	PCR-US94-10358-2	Sequence 2, Appl1
837	26	54.2	333	2	US-09-770-767-44340	Sequence 44340, A	910	26	54.2	399	2	US-09-761-962A-21	Sequence 21, Appl1
838	26	54.2	336	1	US-08-118-270-54	Sequence 54, Appl1	911	26	54.2	400	1	US-08-351-146-6	Sequence 6, Appl1
839	26	54.2	336	2	US-09-248-796A-15889	Sequence 15889, A	912	26	54.2	400	1	US-08-384-826-6	Sequence 6, Appl1
840	26	54.2	336	2	US-10-152-886-81	Sequence 81, Appl1	913	26	54.2	400	2	US-08-889-108-8	Sequence 8, Appl1
841	26	54.2	336	4	PCR-US93-08528-54	Sequence 54, Appl1	914	26	54.2	400	2	US-08-895-474-6	Sequence 6, Appl1
842	26	54.2	339	2	US-09-692-570-6	Sequence 5375, Ap	915	26	54.2	400	2	US-08-188-275A-2	Sequence 2, Appl1
843	26	54.2	342	2	US-09-328-352-5375	Sequence 32874, A	916	26	54.2	400	2	US-09-351-198-2	Sequence 2, Appl1
844	26	54.2	342	2	US-09-270-767-32874	Sequence 46644, A	917	26	54.2	400	2	US-09-113-426-2	Sequence 2, Appl1
845	26	54.2	354	2	US-09-270-767-46644	Sequence 1227, Ap	918	26	54.2	400	2	US-09-252-991A-19992	Sequence 19992, A
846	26	54.2	354	2	US-09-538-092-1227	Sequence 2, Appl1	919	26	54.2	400	4	PCR-US94-10358-8	Sequence 8, Appl1
847	26	54.2	356	2	US-08-430-286A-2	Sequence 2, Appl1	920	26	54.2	401	2	US-09-761-962A-20	Sequence 20, Appl1
848	26	54.2	356	2	US-08-430-286A-5	Sequence 5, Appl1	921	26	54.2	406	2	US-09-491-577-38	Sequence 38, Appl1
849	26	54.2	358	1	US-08-700-186-2	Sequence 2, Appl1	922	26	54.2	409	2	US-09-761-962A-27	Sequence 27, Appl1
850	26	54.2	358	2	US-08-914-981-2	Sequence 2, Appl1	923	26	54.2	412	2	US-10-104-047-3475	Sequence 3475, Ap
851	26	54.2	358	2	US-09-116-115-2	Sequence 2, Appl1	924	26	54.2	420	1	US-08-405-271A-20	Sequence 20, Appl1
852	26	54.2	358	2	US-09-541-762-2	Sequence 2, Appl1	925	26	54.2	420	2	US-08-592-126-142	Sequence 142, App
853	26	54.2	358	2	US-09-270-767-46004	Sequence 46004, A	926	26	54.2	420	2	US-09-168-595-142	Sequence 142, App
854	26	54.2	359	2	US-09-761-962A-18	Sequence 18, Appl1	927	26	54.2	423	2	US-09-198-457A-515	Sequence 479, App
855	26	54.2	359	2	US-09-949-016-7301	Sequence 7301, Ap	928	26	54.2	423	2	US-09-438-188A-479	Sequence 6, Appl1
856	26	54.2	364	2	US-09-270-767-46731	Sequence 46731, A	929	26	54.2	424	2	US-09-341-446B-6	Sequence 8, Appl1
857	26	54.2	368	2	US-09-328-352-7910	Sequence 7910, Ap	930	26	54.2	424	2	US-09-341-446B-8	Sequence 4, Appl1
858	26	54.2	370	2	US-09-252-991A-21152	Sequence 21152, A	931	26	54.2	427	2	US-07-679-052A-15	Sequence 15, Appl1
859	26	54.2	370	2	US-09-328-352-7915	Sequence 7915, Ap	932	26	54.2	434	1	US-09-489-038A-12898	Sequence 12898, A
860	26	54.2	375	2	US-09-583-110-3837	Sequence 3837, Ap	933	26	54.2	434	2	US-09-162-021B-12	Sequence 12, Appl1
861	26	54.2	376	2	US-08-387-707-17	Sequence 17, Appl1	934	26	54.2	434	2	US-09-270-767-45974	Sequence 17, Appl1
862	26	54.2	376	2	US-08-405-271A-17	Sequence 1088, Ap	935	26	54.2	437	2	US-09-761-962A-17	Sequence 17, Appl1
863	26	54.2	377	2	US-09-107-433-3088	Sequence 3088, Ap	936	26	54.2	438	2	US-09-134-000C-5410	Sequence 5410, Ap
864	26	54.2	380	1	US-08-149-093A-7	Sequence 7, Appl1	937	26	54.2	443	2	US-09-761-962A-28	Sequence 28, Appl1
865	26	54.2	380	1	US-08-911-245-7	Sequence 7, Appl1	938	26	54.2	443	2	US-09-902-524A-10764	Sequence 10764, A
866	26	54.2	380	2	US-09-170-311-7	Sequence 7, Appl1	939	26	54.2	448	2	US-09-230-371A-28	Sequence 28, Appl1
867	26	54.2	380	2	US-08-676-351-5	Sequence 5, Appl1	940	26	54.2	448	2	US-09-341-446B-4	Sequence 4, Appl1
868	26	54.2	380	2	US-08-147-592A-2	Sequence 2, Appl1	941	26	54.2	448	2	US-09-166-316-2	Sequence 2, Appl1
869	26	54.2	380	2	US-08-765-743-2	Sequence 2, Appl1	942	26	54.2	457	2	US-09-124-238A-10	Sequence 10, Appl1
870	26	54.2	380	2	US-08-188-775A-5	Sequence 5, Appl1	943	26	54.2	457	2	US-09-9124-238A-10	Sequence 10, Appl1
871	26	54.2	380	2	US-09-473-7	Sequence 7, Appl1	944	26	54.2	457	2	US-09-721-975-10	Sequence 10, Appl1
872	26	54.2	380	2	US-08-232-694A-2	Sequence 2, Appl1	945	26	54.2	457	2	US-09-986-621-10	Sequence 10, Appl1
873	26	54.2	380	2	US-09-351-198-5	Sequence 5, Appl1	946	26	54.2	457	2	US-09-986-621-10	Sequence 10, Appl1
874	26	54.2	380	2	US-09-341-446B-2	Sequence 2, Appl1	947	26	54.2	457	2	US-09-986-621-10	Sequence 10, Appl1
875	26	54.2	380	2	US-09-113-426-5	Sequence 5, Appl1	948	26	54.2	457	2	US-09-986-621-10	Sequence 10, Appl1
876	26	54.2	380	2	US-09-328-352-4497	Sequence 4497, Ap	949	26	54.2	457	2	US-09-986-621-10	Sequence 10, Appl1
877	26	54.2	380	2	US-09-214-904-6	Sequence 543, App	950	26	54.2	457	2	US-09-986-621-10	Sequence 10, Appl1
878	26	54.2	380	2	US-08-826-509-543	Sequence 42808, A	951	26	54.2	460	1	US-08-351-981-4	Sequence 42118, A
879	26	54.2	383	2	US-09-270-767-42808	Sequence 25, Appl1	952	26	54.2	460	2	US-09-270-767-42118	Sequence 4259, Ap
880	26	54.2	390	2	US-09-761-962A-25	Sequence 25, Appl1	953	26	54.2	465	2	US-09-949-016-9259	Sequence 14567, A
881	26	54.2	391	1	US-08-454-549-3	Sequence 3, Appl1	954	26	54.2	467	2	US-09-902-540-14567	Sequence 43914, A
882	26	54.2	391	1	US-08-454-552-3	Sequence 3, Appl1	955	26	54.2	468	2	US-09-537-357-53	Sequence 53914, A
883	26	54.2	391	2	US-08-676-351-4	Sequence 4, Appl1	956	26	54.2	473	2	US-09-270-767-43914	Sequence 9255, Ap
884	26	54.2	391	2	US-09-761-962A-26	Sequence 26, Appl1	957	26	54.2	473	2	US-09-949-016-9255	Sequence 5597, Ap
885	26	54.2	392	2	US-09-761-962A-19	Sequence 19, Appl1	958	26	54.2	473	2	US-09-134-000C-5597	Sequence 45923, A
886	26	54.2	392	2	US-09-270-767-5161	Sequence 35161, A	959	26	54.2	482	2	US-09-370-767-45523	Sequence 8259, Ap
887	26	54.2	392	2	US-09-270-767-50378	Sequence 50378, A	960	26	54.2	484	2	US-09-949-016-8259	Sequence 224, App
888	26	54.2	392	2	US-08-826-509-547	Sequence 547, App	961	26	54.2	484	2	US-09-538-092-224	Sequence 10245, A
889	26	54.2	393	1	US-08-559-303B-76	Sequence 76, Appl1	962	26	54.2	501	2	US-09-270-767-42045	Sequence 3082, Ap
890	26	54.2	393	2	US-09-175-828-76	Sequence 76, Appl1	963	26	54.2	501	2	US-10-104-047-3082	Sequence 22480, A
891	26	54.2	393	2	US-09-753-143-76	Sequence 76, Appl1	964	26	54.2	504	2	US-09-252-991A-15238	Sequence 15238, A
892	26	54.2	394	2	US-08-405-271A-22	Sequence 22, Appl1	965	26	54.2	504	2	US-09-448-796A-15238	Sequence 6562, Ap
893	26	54.2	397	1	US-07-956-697B-5	Sequence 5, Appl1	966	26	54.2	519	2	US-09-107-532A-6562	Sequence 18286, A
894	26	54.2	397	1	US-08-263-098-5	Sequence 5, Appl1	967	26	54.2	535	2	US-09-252-991A-18286	Sequence 3342, Ap
895	26	54.2	397	2	US-09-270-767-61131	Sequence 46131, A	968	26	54.2	535	2	US-09-107-433-3342	Sequence 2, Appl1
896	26	54.2	398	1	US-08-149-093A-5	Sequence 5, Appl1	969	26	54.2	540	2	US-09-433-994-2	Sequence 3359, Ap
897	26	54.2	398	1	US-08-911-245-5	Sequence 5, Appl1	970	26	54.2	540	2	US-08-884-493-2	Sequence 2, Appl1
898	26	54.2	398	2	US-09-170-311-5	Sequence 5, Appl1	971	26	54.2	550	1	US-08-884-494-2	Sequence 2, Appl1
899	26	54.2	398	2	US-08-889-108-2	Sequence 2, Appl1	972	26	54.2	550	1	US-08-345-212-2	Sequence 2, Appl1
900	26	54.2	398	2	US-08-120-601B-2	Sequence 2, Appl1	973	26	54.2	550	1	US-09-249-003-2	Sequence 2, Appl1
901	26	54.2	398	2	US-08-188-275A-3	Sequence 16, Appl1	974	26	54.2	550	2	US-09-655-844-2	Sequence 2, Appl1
902	26	54.2	398	2	US-08-387-707-16	Sequence 5, Appl1	975	26	54.2				
903	26	54.2	398	2	US-09-510-473-5	Sequence 5, Appl1	976	26	54.2				

977 26 54.2 552 1 US-08-243-010-6 Sequence 6, Appl.
978 26 54.2 557 2 US-09-949-016-8715 Sequence 8715, Ap
979 26 54.2 557 2 US-09-949-016-8716 Sequence 8716, Ap
980 26 54.2 563 2 US-09-252-991A-24084 Sequence 24084, A
981 26 54.2 567 2 US-10-172-527A-7 Sequence 7, Appl.
982 26 54.2 568 2 US-09-469-200E-10 Sequence 10, Appl
983 26 54.2 575 2 US-09-252-991A-25723 Sequence 25723, A
984 26 54.2 578 2 US-09-248-796A-14784 Sequence 14784, A
985 26 54.2 586 2 US-09-902-540-10260 Sequence 10260, A
986 26 54.2 589 2 US-09-902-540-11834 Sequence 11834, A
987 26 54.2 590 1 US-08-448-196A-9 Sequence 9, Appl.
988 26 54.2 604 2 US-09-949-016-11667 Sequence 11667, A
989 26 54.2 644 2 US-09-198-452A-822 Sequence 822, App
990 26 54.2 644 2 US-09-438-185A-774 Sequence 774, App
991 26 54.2 672 2 US-09-270-767-46165 Sequence 46165, A
992 26 54.2 691 2 US-09-605-703B-1624 Sequence 1624, Ap
993 26 54.2 694 2 US-09-270-767-36948 Sequence 36948, A
994 26 54.2 694 2 US-09-270-767-52165 Sequence 52165, A
995 26 54.2 700 2 US-09-248-796A-16968 Sequence 16968, A
996 26 54.2 710 2 US-09-079-812E-2 Sequence 2, Appl.
997 26 54.2 726 2 US-09-489-039A-7465 Sequence 7465, Ap
998 26 54.2 739 2 US-09-949-016-9709 Sequence 9709, Ap
999 26 54.2 750 2 US-10-046-433-2 Sequence 2, Appl.
1000 26 54.2 751 1 US-08-836-443-3 Sequence 3, Appl.

ALIGNMENTS

RESULT 1
US-08-787-547-103
Sequence 103, Application US/08787547
Patent No. 5783567
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Curley, Joanne M.
APPLICANT: Langer, Robert S.
TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY
TITLE OF INVENTION: OF NUCLEIC ACID
NUMBER OF SEQUENCES: 107
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/787,547
FILING DATE: 22-JAN-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/003001
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 103:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-787-547-103

Query Match 100.0%; Score 48; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||||
DB 1 FAFRDLCTV 9

US-08-197-484-67

Sequence 67, Application US/08197484

Patent No. 641931

GENERAL INFORMATION:
APPLICANT: VITIELLO, Maria A.
APPLICANT: CHESTNUT, Robert W.
APPLICANT: SETTE, Alessandro D.
APPLICANT: GRAY, Howard
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Kourie and Crew
STREET: Stewart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 67:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide

US-08-197-484-67

Query Match 100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9

Db 1 FAFRDLCTIV 9

RESULT 3
PCT-US95-02121-67
Sequence 67, Application PC/TUS9502121

GENERAL INFORMATION:

APPLICANT:

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING

TITLE OF INVENTION: CTL IMMUNITY

NUMBER OF SEQUENCES: 153

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/02121

FILING DATE: 16-FEB-1995

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/197,484

FILING DATE: 16-FEB-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/935,811

FILING DATE: 26-AUG-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/874,491

FILING DATE: 27-APR-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/827,682

FILING DATE: 29-JAN-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/749,568

FILING DATE: 26-AUG-1991

ATTORNEY/AGENT INFORMATION:

NAME: Parmelee, Steven W.

REGISTRATION NUMBER: 31,980

REFERENCE/DOCKET NUMBER: 14137-26-4PC

TELECOMMUNICATION INFORMATION:

TELEPHONE: (206) 467-9600

TELEFAX: (415) 543-5043

INFORMATION FOR SEQ ID NO: 67:

SEQUENCE CHARACTERISTICS:

LENGTH: 9 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: peptide

PCT-US95-02121-67

Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 1 FAFRDLCTIV 9

RESULT 4
US-09-980-523A-6
Sequence 6, Application US/09980523A

Patent No. 6783763

GENERAL INFORMATION:

APPLICANT: CHOPPIN, JEANNINE

APPLICANT: BOURGAULT VILLADA, ISABELLE

APPLICANT: GUILLET, JEAN-GERARD

APPLICANT: CONNAN, FRANCES

APPLICANT: FERRIES, ESTELLE

TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7

TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE

TITLE OF INVENTION: PARTICULARLY IN VACCINATION

FILE REFERENCE: WO81 AO INS

CURRENT APPLICATION NUMBER: US/09/980,523A

CURRENT FILING DATE: 2002-04-29

PRIOR APPLICATION NUMBER: PCT/FR00/01513

PRIOR FILING DATE: 2000-05-31

PRIOR APPLICATION NUMBER: FR 99/07012

PRIOR FILING DATE: 1999-06-03

NUMBER OF SEQ ID NOS: 24

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 6

LENGTH: 22

TYPE: PRT

ORGANISM: Human Papillomavirus

US-09-980-523A-6

Query Match 100.0%; Score 48; DB 2; Length 22;
Best Local Similarity 100.0%; Pred. No. 0.026;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 7 FAFRDLCTIV 15

RESULT 5
US-09-601-729-276
Sequence 276, Application US/09601729

Patent No. 6683052

GENERAL INFORMATION:

APPLICANT: THIAM, KADER

APPLICANT: AURIAULT, CLAUDE

APPLICANT: GRAS-MASSÉ, HELENE

APPLICANT: LOING, ESTELLE

APPLICANT: VERMAERDE, CLAUDIE

APPLICANT: GUILLET, JEAN GERARD

TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USES

TITLE OF INVENTION: THEREOF IN PHARMACEUTICAL COMPOSITIONS

FILE REFERENCE: USB-97-AU-IN

CURRENT APPLICATION NUMBER: US/09/601,729

CURRENT FILING DATE: 2000-11-20

PRIOR APPLICATION NUMBER: PCT/FR99/00259

PRIOR FILING DATE: 1999-02-05

PRIOR APPLICATION NUMBER: 98 01439

PRIOR FILING DATE: 1998-02-06

NUMBER OF SEQ ID NOS: 281

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 276

LENGTH: 23

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Synthetic

US-09-601-729-276
Query Match 100.0%; Score 48; DB 2; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 8 FAFRDLCTIV 16

RESULT 6
US-09-701-080C-18
Sequence 18, Application US/09701080C

Patent No. 6864054

GENERAL INFORMATION:

APPLICANT: INSTITUTE OF MOLECULAR AND CELL BIOLOGY

TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING PROTEIN AND RELATED PROTEIN P300

TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION

```
FILE REFERENCE: N73477C GCM
CURRENT APPLICATION NUMBER: US/09/701,080C
CURRENT FILING DATE: 2001-02-27
PRIOR APPLICATION NUMBER: GB 9811303.8
PRIOR FILING DATE: 1998-05-26
PRIOR APPLICATION NUMBER: GB 9900157.0
PRIOR FILING DATE: 1999-01-05
NUMBER OF SEQ ID NOS: 36
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
LENGTH: 151
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-701-080C-18

Query Match          100.0%; Score 48; DB 2; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 45 FAFRDLCTV 53

RESULT 7
US-09-980-523A-2
Sequence 2, Application US/09980523A
Patent No. 6783763
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 AND E7
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: MOBI AO INS
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: PR 99/07012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
LENGTH: 158
TYPE: PRT
ORGANISM: Human Papillomavirus
US-09-980-523A-2

Query Match          100.0%; Score 48; DB 2; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 52 FAFRDLCTV 60

RESULT 8
US-08-316-239B-3
Sequence 3, Application US/08316239B
Patent No. 5679509
GENERAL INFORMATION:
APPLICANT: Wheeler, Cosette M.
APPLICANT: Parmenter, Cheryl A.
TITLE OF INVENTION: Methods and a Diagnostic Aid for
TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated with an
TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia and
TITLE OF INVENTION: Cervical Cancer
NUMBER OF SEQUENCES: 4
```

```
CORRESPONDENCE ADDRESS:
ADDRESS: Jagtiani & Associates
STREET: 6126 Rocky Way Court
CITY: Centreville
STATE: VA
COUNTRY: USA
ZIP: 20120-3400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
TELEFAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-316-239B-3

Query Match          100.0%; Score 48; DB 1; Length 162;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 52 FAFRDLCTV 60

RESULT 9
US-08-316-239B-4
Sequence 4, Application US/08316239B
Patent No. 5679509
GENERAL INFORMATION:
APPLICANT: Wheeler, Cosette M.
APPLICANT: Parmenter, Cheryl A.
TITLE OF INVENTION: Methods and a Diagnostic Aid for
TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated with an
TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia and
TITLE OF INVENTION: Cervical Cancer
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESS: Jagtiani & Associates
STREET: 6126 Rocky Way Court
CITY: Centreville
STATE: VA
COUNTRY: USA
ZIP: 20120-3400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
```

REFERENCE/DOCKET NUMBER: UNME-0001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
TELEFAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-316-239B-4

Query Match 100.0%; Score 48; DB 1; Length 162;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 52 FAFRDLCIV 60

RESULT 10
US-08-860-165-14
Sequence 14, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PN0157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 172
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-14

Query Match 100.0%; Score 48; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 121 FAFRDLCIV 129

RESULT 11
US-09-359-382-14
Sequence 14, Application US/09359382
Patent No. 6306397
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165

EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PN0157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 172
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-359-382-14

Query Match 100.0%; Score 48; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 121 FAFRDLCIV 129

RESULT 12
US-09-462-993-1
Sequence 1, Application US/09462293
Patent No. 6884786
GENERAL INFORMATION:
APPLICANT: KIENY, Marie-Paule
APPLICANT: BALLOU, Jean-Marc
APPLICANT: BIZOUARRE, Nadine
TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
FILE REFERENCE: 017753-122
CURRENT APPLICATION NUMBER: US/09/462,993
CURRENT FILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: PCT/FR98/01576
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: FR 97/09152
PRIOR FILING DATE: 1997-07-18
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.2
SEQ ID NO 1
LENGTH: 243
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Derived from
human papillomavirus, strain HPV-16, E6 protein
OTHER INFORMATION: fused F protein signals, clone E6*TMF.
US-09-462-993-1

Query Match 100.0%; Score 48; DB 2; Length 243;
Best Local Similarity 100.0%; Pred. No. 0.26;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 80 FAFRDLCIV 88

RESULT 13
US-08-860-165-10
Sequence 10, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22

```

; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 10
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-10

Query Match          100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 52 FAFRDLCIV 60

RESULT 14
US-09-359-382-10
; Sequence 10, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; PRIOR FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 10
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-10

Query Match          100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 52 FAFRDLCIV 60

RESULT 15
US-09-367-309A-1
; Sequence 1, Application US/09367309A
; Patent No. 6428807
; GENERAL INFORMATION:
; APPLICANT: MACFARLAN, RODERICK I.
; APPLICANT: MALLIAROS, JIM
; TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
; FILE REFERENCE: 017227/0149
; CURRENT APPLICATION NUMBER: US/09/367,309A
; PRIOR FILING DATE: 1999-08-11
; PRIOR APPLICATION NUMBER: PCT/AU98/00080
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: AU PO 5178
```

```

; PRIOR FILING DATE: 1997-02-19
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 1
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

Query Match          100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 52 FAFRDLCIV 60

RESULT 16
US-09-485-885-4
; Sequence 4, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; PRIOR FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-4

Query Match          100.0%; Score 48; DB 2; Length 273;
Best Local Similarity 100.0%; Pred. No. 0.32;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
Db 158 FAFRDLCIV 166

RESULT 17
US-09-485-885-10
; Sequence 10, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; PRIOR FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
```

SEQ ID NO 10
LENGTH: 292
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-10

Query Match 100.0%; Score 48; DB 2; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.34;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 177 FAFRDLCIV 185

RESULT 18
US-09-485-885-6
Sequence 6, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Bernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 371
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-6

Query Match 100.0%; Score 48; DB 2; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.43;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 158 FAFRDLCIV 166

RESULT 19
US-09-485-885-14
Sequence 14, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Bernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 14
LENGTH: 390
TYPE: PRT

ORGANISM: Homo sapien
US-09-485-885-14

Query Match 100.0%; Score 48; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 177 FAFRDLCIV 185

RESULT 20
US-08-117-083-10
Sequence 10, Application US/08117083
Patent No. 5719054
GENERAL INFORMATION:
APPLICANT: Bourneil, Michael E.
APPLICANT: Ingis, Stephen C.
APPLICANT: Munro, Alan J.
TITLE OF INVENTION: Recombinant Virus Vectors Encoding Human
NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSER: Walter H. Dregler
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/117,083
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dregler, Walter H.
REGISTRATION NUMBER: 24,190
REFERENCE/DOCKET NUMBER: A-58783
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 182 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..182
OTHER INFORMATION:
OTHER INFORMATION: the open reading frame."

Query Match 97.9%; Score 47; DB 1; Length 182;
Best Local Similarity 88.9%; Pred. No. 0.32;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 53 FAFRDLCIV 61

RESULT 21
US-08-934-915-161
Sequence 161, Application US/08934915

Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOSSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. FOUTCH
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 161:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-161
Query Match 89.6%; Score 43; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 0.2;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 FAFRDLCIV 9
DB 6 FAFRNLICIV 14
RESULT 22
US-07-909-122-4
Sequence 4, Application US/07909122
Patent No. 5415995
GENERAL INFORMATION:
APPLICANT: SCHOOLNIK, GARY K.
APPLICANT: PALERSKY, JOEL M.
TITLE OF INVENTION: DIAGNOSTIC PEPTIDES OF HUMAN PAPILLOMA
TITLE OF INVENTION: VIRUS
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORSTER
STREET: 755 Page Mill Road
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/909,122
FILING DATE: 19920706
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: BENZ, WILLIAM H.
REGISTRATION NUMBER: 25,952
REFERENCE/DOCKET NUMBER: 28600-20105.01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 813-5600
TELEFAX: (415) 494-0792
TELEX: 706141
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: AMINO ACID
STRANDEDNESS: single
TOPOLOGY: linear
US-07-909-122-4
Query Match 83.3%; Score 40; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 FAFRDLC 7
DB 8 FAFRDLC 14
RESULT 23
US-09-489-847-160
Sequence 160, Application US/09489847
Patent No. 6476195
GENERAL INFORMATION:
APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: P2031P1
CURRENT APPLICATION NUMBER: US/09/489,847
CURRENT FILING DATE: 2000-01-24
EARLIER APPLICATION NUMBER: PCT/US99/17130
EARLIER FILING DATE: 1999-07-29
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER FILING DATE: 1998-07-30
EARLIER APPLICATION NUMBER: 60/095,486
EARLIER FILING DATE: 1998-08-05
EARLIER APPLICATION NUMBER: 60/096,319
EARLIER FILING DATE: 1998-08-12
EARLIER APPLICATION NUMBER: 60/095,454
EARLIER FILING DATE: 1998-08-06
EARLIER APPLICATION NUMBER: 60/095,455
EARLIER FILING DATE: 1998-08-06
NUMBER OF SEQ ID NOS: 376
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 160
LENGTH: 162
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (162)
OTHER INFORMATION: Xaa equals stop translation
US-09-489-847-160
Query Match 77.1%; Score 37; DB 2; Length 162;
Best Local Similarity 66.7%; Pred. No. 19;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 1 FAFRDLCIV 9
DB 30 FAFARLCIV 38

```
RESULT 24
US-09-489-847-320
; Sequence 320, Application US/09489847
; Patent No. 6476195
; GENERAL INFORMATION:
; APPLICANT: Rosen et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P1
; CURRENT APPLICATION NUMBER: US/09/489,847
; CURRENT FILING DATE: 2000-01-24
; EARLIER APPLICATION NUMBER: PCT/US99/17130
; EARLIER FILING DATE: 1999-07-29
; EARLIER APPLICATION NUMBER: 60/094,657
; EARLIER FILING DATE: 1998-07-30
; EARLIER APPLICATION NUMBER: 60/095,486
; EARLIER FILING DATE: 1998-08-05
; EARLIER APPLICATION NUMBER: 60/096,319
; EARLIER FILING DATE: 1998-08-12
; EARLIER APPLICATION NUMBER: 60/095,454
; EARLIER FILING DATE: 1998-08-06
; EARLIER APPLICATION NUMBER: 60/095,455
; EARLIER FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 320
; LENGTH: 207
; TYPE: prt
; ORGANISM: Homo sapiens
US-09-489-847-320

Query Match          77.1%; Score 37; DB 2; Length 207;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 PAFRDIQIV 9
Db 76 PAFARLCIV 84

RESULT 25
US-09-999-833A-7
; Sequence 7, Application US/0999833A
; Patent No. 6916648
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerltsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, U. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavlin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James J.
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
```

```
;; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;; FILE REFERENCE: P2630P1CS
;; CURRENT APPLICATION NUMBER: US/09/999,833A
;; CURRENT FILING DATE: 2001-10-24
;; PRIOR APPLICATION NUMBER: 09/918585
;; PRIOR FILING DATE: 2001-07-30
;; PRIOR APPLICATION NUMBER: 60/062250
;; PRIOR FILING DATE: 1997-10-17
;; PRIOR APPLICATION NUMBER: 60/064249
;; PRIOR FILING DATE: 1997-11-03
;; PRIOR APPLICATION NUMBER: 60/065311
;; PRIOR FILING DATE: 1997-11-13
;; PRIOR APPLICATION NUMBER: 60/066364
;; PRIOR FILING DATE: 1997-11-21
;; PRIOR APPLICATION NUMBER: 60/077450
;; PRIOR FILING DATE: 1998-03-10
;; PRIOR APPLICATION NUMBER: 60/077632
;; PRIOR FILING DATE: 1998-03-11
;; PRIOR APPLICATION NUMBER: 60/077641
;; PRIOR FILING DATE: 1998-03-11
;; PRIOR APPLICATION NUMBER: 60/077649
;; PRIOR FILING DATE: 1998-03-11
;; PRIOR APPLICATION NUMBER: 60/077791
;; PRIOR FILING DATE: 1998-03-12
;; PRIOR APPLICATION NUMBER: 60/078004
;; PRIOR FILING DATE: 1998-03-13
;; PRIOR APPLICATION NUMBER: 60/078886
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/078936
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/078910
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/078939
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/079294
;; PRIOR FILING DATE: 1998-03-25
;; PRIOR APPLICATION NUMBER: 60/079656
;; PRIOR FILING DATE: 1998-03-26
;; PRIOR APPLICATION NUMBER: 60/079664
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079689
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079663
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079728
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079786
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079920
;; PRIOR FILING DATE: 1998-03-30
;; PRIOR APPLICATION NUMBER: 60/079923
;; PRIOR FILING DATE: 1998-03-30
;; PRIOR APPLICATION NUMBER: 60/080105
;; PRIOR FILING DATE: 1998-03-31
;; PRIOR APPLICATION NUMBER: 60/080107
;; PRIOR FILING DATE: 1998-03-31
;; PRIOR APPLICATION NUMBER: 60/080165
;; PRIOR FILING DATE: 1998-03-31
;; PRIOR APPLICATION NUMBER: 60/080194
;; PRIOR FILING DATE: 1998-03-31
;; PRIOR APPLICATION NUMBER: 60/080327
;; PRIOR FILING DATE: 1998-04-01
;; PRIOR APPLICATION NUMBER: 60/080328
;; PRIOR FILING DATE: 1998-04-01
;; PRIOR APPLICATION NUMBER: 60/080333
;; PRIOR FILING DATE: 1998-04-01
;; PRIOR APPLICATION NUMBER: 60/080334
;; PRIOR FILING DATE: 1998-04-01
;; PRIOR APPLICATION NUMBER: 60/081070
;; PRIOR FILING DATE: 1998-04-08
;; PRIOR APPLICATION NUMBER: 60/081049
;; PRIOR FILING DATE: 1998-04-08
```

PRIOR APPLICATION NUMBER: 60/081071
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081195
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081203
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081229
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081955
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081817
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081952
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081838
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082569
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082704
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082804
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082700
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/083336
PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083392
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083495
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083496
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083499
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083558
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083500
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083742
PRIOR FILING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: 60/084366
PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084639
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084598
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627

PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085582
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085700
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085689
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697

Query Match 77.1% Score 37; DB 2; Length 492;
Best Local Similarity 66.7% Pred. No. 57;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 1 FAFRDLCTIV 9
Db 361 FAFRDLCTIV 369

RESULT 26
US-10-020-445A-7
Sequence 7, Application US/10020445A
Patent No. 6962797
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Baton, Dan
APPLICANT: Ferrata, Napoleon
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Geiber, Hanspeter
APPLICANT: Gerlisen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Kuo, Sophia S.
APPLICANT: Napier, Mary A.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Shelton, David L.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2630PLC74
CURRENT FILING DATE: 2001-10-24
PRIOR FILING DATE: 2001-07-30

[illegible]

```

; PRIOR APPLICATION NUMBER: 60/085523
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085582
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085700
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085689
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
```

```
Query Match      77.1%; Score 37; DB 2; Length 492;
Best Local Similarity 66.7%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCV 9
      |||:||||
Db      361 FAFARLCV 369
```

```

RESULT 27
US-09-949-016-6312
; Sequence 6312, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6312
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-6312
```

```
Query Match      72.9%; Score 35; DB 2; Length 411;
Best Local Similarity 75.0%; Pred. No. 1.1e+02;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
      |||:||||
Db      236 FTFNDLCI 303
```

```

RESULT 28
US-09-949-016-9493
; Sequence 9493, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
```

```

; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9493
; LENGTH: 414
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-9493
```

```
Query Match      72.9%; Score 35; DB 2; Length 414;
Best Local Similarity 75.0%; Pred. No. 1.1e+02;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
      |||:||||
Db      299 FTFNDLCI 306
```

```

RESULT 29
US-08-776-059-43
; Sequence 43, Application US/08776059B
; Patent No. 6271368
; GENERAL INFORMATION:
; APPLICANT: LENTZEN, Hans
; APPLICANT: BAUR, Jurgen
; APPLICANT: ZINKE, Holger
; TITLE OF INVENTION: RECOMBINANT MISTLETOE LECTIN (RML)
; FILE REFERENCE: 674503-2003
; CURRENT APPLICATION NUMBER: US/08/776,059B
; CURRENT FILING DATE: 1999-06-19
; EARLIER APPLICATION NUMBER: PCT/EP96/02273
; EARLIER FILING DATE: 1996-06-25
; EARLIER APPLICATION NUMBER: 9510949.8
; EARLIER FILING DATE: 1995-06-26
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 43
; LENGTH: 263
; TYPE: PRT
; ORGANISM: Viscum album
US-08-776-059-43
```

```
Query Match      70.8%; Score 34; DB 2; Length 263;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
      |||:||||
Db      146 YGFRDLCM 153
```

```

RESULT 30
US-09-627-165E-10
; Sequence 10, Application US/09627165E
; Patent No. 6846913
; GENERAL INFORMATION:
; APPLICANT: KIM, Jong-Bae
; TITLE OF INVENTION: CRUDE EXTRACT FROM Viscum album coloratum, AND PROTEINS
; FILE REFERENCE: Korean Mistletoe Lectin
; CURRENT APPLICATION NUMBER: US/09/627,165E
; CURRENT FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 80
; SEQ ID NO 10
; LENGTH: 263
; TYPE: PRT
; ORGANISM: Viscum album coloratum
; FEATURE:
```



```

; FEATURE:
; NAME/KEY: SITE
; LOCATION: 56
; OTHER INFORMATION: product= "Xaa is Gly or Asn"
; FEATURE:
; OTHER INFORMATION: /label= Xaa3
; NAME/KEY: SITE
; LOCATION: 95
; OTHER INFORMATION: product= "Xaa is Gly or Asp"
; FEATURE:
; OTHER INFORMATION: /label= Xaa4
; NAME/KEY: SITE
; LOCATION: 157
; OTHER INFORMATION: product= "Xaa is Gly or Gln"
; FEATURE:
; OTHER INFORMATION: /label= Xaa5
; NAME/KEY: SITE
; LOCATION: 166
; OTHER INFORMATION: product= "Xaa is Val or Asp"
; FEATURE:
; OTHER INFORMATION: /label= Xaa6
; NAME/KEY: SITE
; LOCATION: 170
; OTHER INFORMATION: product= "Xaa is Gln or Lys"
; FEATURE:
; OTHER INFORMATION: /label= Xaa7
; NAME/KEY: SITE
; LOCATION: 173
; OTHER INFORMATION: product= "Xaa is Gly or missing"
; FEATURE:
; OTHER INFORMATION: /label= Xaa8
; NAME/KEY: SITE
; LOCATION: 174
; OTHER INFORMATION: product= "Xaa is Arg or Lys"
; FEATURE:
; OTHER INFORMATION: /label= Xaa9
; NAME/KEY: SITE
; LOCATION: 195
; OTHER INFORMATION: product= "Xaa is Cys or Ser or Val"
; FEATURE:
; OTHER INFORMATION: /label= Xaa10
; NAME/KEY: SITE
; LOCATION: 211
; OTHER INFORMATION: product= "Xaa is Ala or Gly"
; FEATURE:
; OTHER INFORMATION: /label= Xaa11
; NAME/KEY: SITE
; LOCATION: 212
; OTHER INFORMATION: product= "Xaa is Gly or Ala"
; FEATURE:
; OTHER INFORMATION: /label= Xaa12
; NAME/KEY: SITE
; LOCATION: 214
; OTHER INFORMATION: product= "Xaa is Ser or Gly"
; FEATURE:
; OTHER INFORMATION: /label= Xaa13
; NAME/KEY: SITE
; LOCATION: 215
; OTHER INFORMATION: product= "Xaa is Gly or Ser"
; FEATURE:
; OTHER INFORMATION: /label= Xaa14
; NAME/KEY: SITE
; LOCATION: 224
; OTHER INFORMATION: product= "Xaa is Gly or Tyr"
; FEATURE:
; OTHER INFORMATION: /label= Xaa15
; NAME/KEY: SITE
; LOCATION: 231
; OTHER INFORMATION: product= "Xaa is Asn or Ser or Thr or Lys"
; FEATURE:
; OTHER INFORMATION: /label= Xaa16
; NAME/KEY: SITE
; LOCATION: 232
```

```

; OTHER INFORMATION: product= "Xaa is Ser or Gly"
; OTHER INFORMATION: /label= Xaa17
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 233
; OTHER INFORMATION: product= "Xaa is Leu or Pro"
; FEATURE:
; OTHER INFORMATION: /label= Xaa17
; NAME/KEY: SITE
; LOCATION: 234
; OTHER INFORMATION: product= "Xaa is Ala or Met"
; FEATURE:
; OTHER INFORMATION: /label= Xaa19
; NAME/KEY: SITE
; LOCATION: 235
; OTHER INFORMATION: product= "Xaa is Met or Val"
; FEATURE:
; OTHER INFORMATION: /label= Xaa20
; NAME/KEY: SITE
; LOCATION: 264
; OTHER INFORMATION: product= "Xaa is Pro or Phe"
; OTHER INFORMATION: /label= Xaa21
US-09-601-667C-3

Query Match          70.8%; Score 34; DB 2; Length 264;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 PAFRDLCT 8
; : : : : :
Db      146 YGFRDLCM 153

RESULT 35
US-09-601-667C-7
; Sequence 7, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; APPLICANT: Woelters, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 7
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin 1 (match)
US-09-601-667C-7

Query Match          70.8%; Score 34; DB 2; Length 264;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 PAFRDLCT 8
; : : : : :
Db      146 YGFRDLCM 153

RESULT 36
US-09-601-667C-8
; Sequence 8, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
```

```

; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; APPLICANT: Welters, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; CURRENT FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 8
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin B2 (match)
US-09-601-667C-8
```

```

Query Match          70.8%; Score 34; DB 2; Length 264;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
       : |||||:
Db      146 YGFRDLCM 153
```

```

RESULT 37
US-09-601-667C-9
; Sequence 9, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; APPLICANT: Welters, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; CURRENT FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 9
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin B3 (match)
US-09-601-667C-9
```

```

Query Match          70.8%; Score 34; DB 2; Length 264;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
       : |||||:
Db      146 YGFRDLCM 153
```

```

RESULT 38
US-09-601-667C-10
; Sequence 10, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
```

```

; APPLICANT: Welters, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; CURRENT FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 10
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin B4 (match)
US-09-601-667C-10
```

```

Query Match          70.8%; Score 34; DB 2; Length 264;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
       : |||||:
Db      146 YGFRDLCM 153
```

```

RESULT 39
US-09-601-667C-11
; Sequence 11, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; APPLICANT: Welters, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; CURRENT FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 11
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin B5 (match)
US-09-601-667C-11
```

```

Query Match          70.8%; Score 34; DB 2; Length 264;
Best Local Similarity 62.5%; Pred. No. 1.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCI 8
       : |||||:
Db      146 YGFRDLCM 153
```

```

RESULT 40
US-09-252-991A-26698
; Sequence 26698, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
```

```

; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 26698
; LENGTH: 379
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-26698

Query Match          70.8%; Score 34; DB 2; Length 379;
Best Local Similarity 85.7%; Pred. No. 1.5e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 FAFRDLG 7
Db      285 FAFADLC 291

RESULT 41
US-09-601-667C-4
; Sequence 4, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; APPLICANT: Welter, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 4
; LENGTH: 531
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: MLI match
US-09-601-667C-4

Query Match          70.8%; Score 34; DB 2; Length 531;
Best Local Similarity 62.5%; Pred. No. 2.1e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      1 FAFRDLG 8
Db      414 YGFRDLCM 421

RESULT 42
US-09-601-667C-1
; Sequence 1, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; APPLICANT: Welter, Peter
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/36636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR APPLICATION NUMBER: D 198 04 210.8
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
```

```

; SEQ ID NO 1
; LENGTH: 533
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 15
; OTHER INFORMATION: product= "Xaa is Asp or Glu"
; OTHER INFORMATION: /label= Xaa1
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 63
; OTHER INFORMATION: product= "Xaa is Gly or Gln"
; OTHER INFORMATION: /label= Xaa2
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 66
; OTHER INFORMATION: product= "Xaa is Ile or Val"
; OTHER INFORMATION: /label= Xaa3
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 75
; OTHER INFORMATION: product= "Xaa is Leu or Ala"
; OTHER INFORMATION: /label= Xaa4
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 107
; OTHER INFORMATION: product= "Xaa is missing"
; OTHER INFORMATION: /label= Xaa5
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 113
; OTHER INFORMATION: product= "Xaa is Asn or Thr"
; OTHER INFORMATION: /label= Xaa6
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 117
; OTHER INFORMATION: product= "Xaa is Pro or Thr"
; OTHER INFORMATION: /label= Xaa7
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 134
; OTHER INFORMATION: product= "Xaa is Asp or Glu"
; OTHER INFORMATION: /label= Xaa8
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 141
; OTHER INFORMATION: product= "Xaa is Ser or Thr"
; OTHER INFORMATION: /label= Xaa9
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 145
; OTHER INFORMATION: product= "Xaa is Phe or Tyr"
; OTHER INFORMATION: /label= Xaa10
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 152
; OTHER INFORMATION: product= "Xaa is Thr or Ala"
; OTHER INFORMATION: /label= Xaa11
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 177
; OTHER INFORMATION: product= "Xaa is Ala or Tyr"
; OTHER INFORMATION: /label= Xaa12
; FEATURE:
; NAME/KEY: SITE
; LOCATION: 180
; OTHER INFORMATION: product= "Xaa is Tyr or Asp"
; OTHER INFORMATION: /label= Xaa13
; FEATURE:
; NAME/KEY: SITE
```

```

/ LOCATION: 165
/ OTHER INFORMATION: product= "Xaa is Ala or Glu"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa14
/ NAME/KEY: SITE
/ LOCATION: 191
/ OTHER INFORMATION: product= "Xaa is Val or Met"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa15
/ NAME/KEY: SITE
/ LOCATION: 219
/ OTHER INFORMATION: product= "Xaa is Ile or Phe"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa16
/ NAME/KEY: SITE
/ LOCATION: 224
/ OTHER INFORMATION: product= "Xaa is Pro or Ser"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa17
/ NAME/KEY: SITE
/ LOCATION: 225
/ OTHER INFORMATION: product= "Xaa is Pro or Thr"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa18
/ NAME/KEY: SITE
/ LOCATION: 232
/ OTHER INFORMATION: product= "Xaa is Thr or Ser"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa19
/ NAME/KEY: SITE
/ LOCATION: 236
/ OTHER INFORMATION: product= "Xaa is Asp or Ser"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa20
/ NAME/KEY: SITE
/ LOCATION: 267
/ OTHER INFORMATION: product= "Xaa is Asn or Ser"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa21
/ NAME/KEY: SITE
/ LOCATION: 290
/ OTHER INFORMATION: product= "Xaa is Cys or Arg"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa22
/ NAME/KEY: SITE
/ LOCATION: 325
/ OTHER INFORMATION: product= "Xaa is Gly or Asn"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa23
/ NAME/KEY: SITE
/ LOCATION: 364
/ OTHER INFORMATION: product= "Xaa is Gly or Asp"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa24
/ NAME/KEY: SITE
/ LOCATION: 426
/ OTHER INFORMATION: product= "Xaa is Gly or Glu"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa25
/ NAME/KEY: SITE
/ LOCATION: 439
/ OTHER INFORMATION: product= "Xaa is Glu or Lys"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa27
/ NAME/KEY: SITE
/ LOCATION: 442
/ OTHER INFORMATION: product= "Xaa is Gly or missing"
/ OTHER INFORMATION: /label= Xaa28

```

```

/ FEATURE:
/ NAME/KEY: SITE
/ LOCATION: 443
/ OTHER INFORMATION: product= "Xaa is Arg or Lys"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa29
/ NAME/KEY: SITE
/ LOCATION: 464
/ OTHER INFORMATION: product= "Xaa is Cys or Ser or Val"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa30
/ NAME/KEY: SITE
/ LOCATION: 480
/ OTHER INFORMATION: product= "Xaa is Ala or Gly"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa
/ NAME/KEY: SITE
/ LOCATION: 481
/ OTHER INFORMATION: product= "Xaa is Gly or Ala"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa32
/ NAME/KEY: SITE
/ LOCATION: 483
/ OTHER INFORMATION: product= "Xaa is Ser or Gly"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa33
/ NAME/KEY: SITE
/ LOCATION: 484
/ OTHER INFORMATION: product= "Xaa is Gly or Ser"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa34
/ NAME/KEY: SITE
/ LOCATION: 493
/ OTHER INFORMATION: product= "Xaa is Gly or Tyr"
/ FEATURE:
/ OTHER INFORMATION: /label= Xaa35
/ NAME/KEY: SITE
/ LOCATION: 500

```

```

Query Match          70.8%; Score 34; DB 2; Length 533;
Best Local Similarity 62.5%; Pred. No. 2.2e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 FAFRDLCT 8
Db      415 YGFRDLCT 422

```

```

RESULT 43
US-09-601-667C-40
; Sequence 40, Application US/09601667C
; Patent No. 6927207
; GENERAL INFORMATION:
; APPLICANT: Morris, Peter
; APPLICANT: Stiefel, Thomas
; APPLICANT: Voelter, Wolfgang
; TITLE OF INVENTION: Recombinant Mistletoe Lectins
; FILE REFERENCE: 29841/3636
; CURRENT APPLICATION NUMBER: US/09/601,667C
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: PCT/EP99/00696
; PRIOR FILING DATE: 1999-02-03
; PRIOR FILING DATE: 1998-02-03
; NUMBER OF SEQ ID NOS: 41
; SEQ ID NO 40
; LENGTH: 534
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mistletoe lectin
; FEATURE:

```

```
NAME/KEY: SITE
LOCATION: (15)..(15)
OTHER INFORMATION: Xaa is Asp or Glu
FEATURE:
NAME/KEY: SITE
LOCATION: (63)..(63)
OTHER INFORMATION: Xaa is Gly or Gln
FEATURE:
NAME/KEY: SITE
LOCATION: (66)..(66)
OTHER INFORMATION: Xaa is Ile or Val
FEATURE:
NAME/KEY: SITE
LOCATION: (75)..(75)
OTHER INFORMATION: Xaa is Leu or Ala
FEATURE:
NAME/KEY: SITE
LOCATION: (114)..(114)
OTHER INFORMATION: Xaa is Asn or Thr
FEATURE:
NAME/KEY: SITE
LOCATION: (118)..(118)
OTHER INFORMATION: Xaa is Pro or Thr
FEATURE:
NAME/KEY: SITE
LOCATION: (135)..(135)
OTHER INFORMATION: Xaa is Asp or Glu
FEATURE:
NAME/KEY: SITE
LOCATION: (142)..(142)
OTHER INFORMATION: Xaa is Ser or Thr
FEATURE:
NAME/KEY: SITE
LOCATION: (146)..(146)
OTHER INFORMATION: Xaa is Phe or Tyr
FEATURE:
NAME/KEY: SITE
LOCATION: (153)..(153)
OTHER INFORMATION: Xaa is Thr or Ala
FEATURE:
NAME/KEY: SITE
LOCATION: (178)..(178)
OTHER INFORMATION: Xaa is Ala or Tyr
FEATURE:
NAME/KEY: SITE
LOCATION: (181)..(181)
OTHER INFORMATION: Xaa is Tyr or Asp
FEATURE:
NAME/KEY: SITE
LOCATION: (186)..(186)
OTHER INFORMATION: Xaa is Ala or Glu
FEATURE:
NAME/KEY: SITE
LOCATION: (192)..(192)
OTHER INFORMATION: Xaa is Val or Met
FEATURE:
NAME/KEY: SITE
LOCATION: (220)..(220)
OTHER INFORMATION: Xaa is Ile or Phe
FEATURE:
NAME/KEY: SITE
LOCATION: (225)..(225)
OTHER INFORMATION: Xaa is Pro or Ser
FEATURE:
NAME/KEY: SITE
LOCATION: (226)..(226)
OTHER INFORMATION: Xaa is Pro or Thr
FEATURE:
NAME/KEY: SITE
LOCATION: (233)..(233)
OTHER INFORMATION: Xaa is Thr or Ser
FEATURE:
NAME/KEY: SITE
LOCATION: (237)..(237)
OTHER INFORMATION: Xaa is Asp or Ser
FEATURE:
NAME/KEY: SITE
LOCATION: (288)..(288)
OTHER INFORMATION: Xaa is Asn or Ser
FEATURE:
NAME/KEY: SITE
LOCATION: (291)..(291)
OTHER INFORMATION: Xaa is Cys or Arg
FEATURE:
NAME/KEY: SITE
LOCATION: (326)..(326)
OTHER INFORMATION: Xaa is Gly or Asn
FEATURE:
NAME/KEY: SITE
LOCATION: (427)..(427)
OTHER INFORMATION: Xaa is Gly or Gln
FEATURE:
NAME/KEY: SITE
LOCATION: (436)..(436)
OTHER INFORMATION: Xaa is Val or Asp
FEATURE:
NAME/KEY: SITE
LOCATION: (440)..(440)
OTHER INFORMATION: Xaa is Gln or Lys
FEATURE:
NAME/KEY: SITE
LOCATION: (443)..(443)
OTHER INFORMATION: Xaa is Gly or missing
FEATURE:
NAME/KEY: SITE
LOCATION: (444)..(444)
OTHER INFORMATION: Xaa is Arg or Lys
FEATURE:
NAME/KEY: SITE
LOCATION: (465)..(465)
OTHER INFORMATION: Xaa is Cys or Ser or Val
FEATURE:
NAME/KEY: SITE
LOCATION: (481)..(481)
OTHER INFORMATION: Xaa is Ala or Gly
FEATURE:
NAME/KEY: SITE
LOCATION: (482)..(482)
OTHER INFORMATION: Xaa is Gly or Ala
FEATURE:
NAME/KEY: SITE
LOCATION: (484)..(484)
OTHER INFORMATION: Xaa is Ser or Gly
FEATURE:
NAME/KEY: SITE
LOCATION: (485)..(485)
OTHER INFORMATION: Xaa is Gly or Ser
FEATURE:
NAME/KEY: SITE
LOCATION: (494)..(494)
OTHER INFORMATION: Xaa is Gly or Tyr
FEATURE:
NAME/KEY: SITE
LOCATION: (501)..(501)
OTHER INFORMATION: Xaa is Asn or Ser or Thr or Lys
FEATURE:
NAME/KEY: SITE
LOCATION: (502)..(502)
OTHER INFORMATION: Xaa is Ser or Gly
FEATURE:
NAME/KEY: SITE
LOCATION: (503)..(503)
```


OTHER INFORMATION: Xaa is Leu or Pro
FEATURE:
NAME/KEY: SITE
LOCATION: (504) ..(504)
OTHER INFORMATION: Xaa is Ala or Met
FEATURE:
NAME/KEY: SITE
LOCATION: (505) ..(505)
OTHER INFORMATION: Xaa is Met or Val
FEATURE:
NAME/KEY: SITE
LOCATION: (534) ..(534)
OTHER INFORMATION: Xaa is Pro or Phe
US-09-601-667C-40

Query Match 70.8%; Score 34; DB 2; Length 534;
Best Local Similarity 62.5%; Pred. No. 2.2e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLIC 8
DB 416 YGFRDLICM 423

RESULT 44
US-08-776-059-35
Sequence 35, Application US/08776059B
Patent No. 6271368
GENERAL INFORMATION:
APPLICANT: LENTZEN, Hans
APPLICANT: ECK, Jurgen
APPLICANT: BAUR, Axel
APPLICANT: ZINK, Holger
TITLE OF INVENTION: RECOMBINANT MISTLETOE LECTIN (RML)
FILE REFERENCE: 674503-2003
CURRENT APPLICATION NUMBER: US/08/776, 059B
EARLIER FILING DATE: 1999-06-19
PCT/EP96/02273
EARLIER FILING DATE: 1996-06-25
EARLIER APPLICATION NUMBER: 95109949.8
EARLIER FILING DATE: 1995-06-26
SOFTWARE: PatentIn Ver. 2.0
NUMBER OF SEQ ID NOS: 56
SEQ ID NO 35
LENGTH: 564
TYPE: PRT
ORGANISM: Viscum album
US-08-776-059-35

Query Match 70.8%; Score 34; DB 2; Length 564;
Best Local Similarity 62.5%; Pred. No. 2.3e+02;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLIC 8
DB 447 YGFRDLICM 454

RESULT 45
US-09-543-681A-7008
Sequence 7008, Application US/09543681A
Patent No. 6605709
GENERAL INFORMATION:
APPLICANT: GARY BRETON
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
FILE REFERENCE: 2709.1002-001
CURRENT APPLICATION NUMBER: US/09/543, 681A
CURRENT FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 60/128, 706
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 8344
SEQ ID NO 7008

LENGTH: 90
TYPE: PRT
ORGANISM: Proteus mirabilis
US-09-543-681A-7008

Query Match 68.8%; Score 33; DB 2; Length 90;
Best Local Similarity 71.4%; Pred. No. 57;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLIC 7
DB 11 FSPDLIC 17

RESULT 46
US-08-247-904B-10
Sequence 10, Application US/08247904B
Patent No. 5981699
GENERAL INFORMATION:
APPLICANT: Rolfe, Mark
APPLICANT: Eckstein, Jens W.
APPLICANT: Draetta, Giulio
TITLE OF INVENTION: Human Ubiquitin Conjugating Enzyme
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley, Hoag & Eliot
STREET: One Post Office Square
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII (text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/247, 904B
FILING DATE: 23-MAY-1994
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 832-7000
TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 158 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-247-904B-10

Query Match 68.8%; Score 33; DB 1; Length 158;
Best Local Similarity 66.7%; Pred. No. 93;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLIC 9
DB 47 FAFRDLFV 55

RESULT 47
US-08-767-942A-19
Sequence 19, Application US/08767942A
Patent No. 6068982
GENERAL INFORMATION:
APPLICANT: Rolfe, Mark
APPLICANT: Chiu, M. Isabel
APPLICANT: Berlin, Vivian
APPLICANT: Damagnez, Veronique

```

; APPLICANT: Draetta, Giulio
; APPLICANT: Guillaume, Cottarel
; TITLE OF INVENTION: UBIQUITIN CONJUGATING ENZYMES
; NUMBER OF SEQUENCES: 45
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HONG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/767,942A
; FILING DATE: 17-DEC-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: MIV-029.04
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-7000
; TELEFAX: 617-832-1000
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 158 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-767-942A-19

Query Match      68.8%; Score 33; DB 2; Length 158;
Best Local Similarity 66.7%; Pred. No. 99;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 FAFRDLCTIV 9
DB      47 FAFKDLFV 55

RESULT 48
; US-08-117-083-14
; Sequence 14, Application US/08117083
; Patent No. 5719054
; GENERAL INFORMATION:
; APPLICANT: Bourneil, Michael E.
; APPLICANT: Ingilis, Stephen C.
; APPLICANT: Munro, Alan J.
; TITLE OF INVENTION: Recombinant Virus Vectors Encoding Human
; TITLE OF INVENTION: Papilloma Virus Proteins
; NUMBER OF SEQUENCES: 70
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Walter H. Dregger
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/117,083
; FILING DATE: 10-SEP-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Dregger, Walter H.
; REGISTRATION NUMBER: 24,190
```

```

; REFERENCE/DOCKET NUMBER: A-58783
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-781-1989
; TELEFAX: 415-398-3249
; TELEX: 910 277299
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 271 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..271
; OTHER INFORMATION:
; OTHER INFORMATION: /note="Xaa refers to stop codon in
; US-08-117-083-14

Query Match      68.8%; Score 33; DB 1; Length 271;
Best Local Similarity 66.7%; Pred. No. 1.7e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 FAFRDLCTIV 9
DB      48 FAFKDLFV 56

RESULT 49
; US-09-485-885-21
; Sequence 21, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP96/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 21
; LENGTH: 278
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-485-885-21

Query Match      68.8%; Score 33; DB 2; Length 278;
Best Local Similarity 66.7%; Pred. No. 1.7e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 FAFRDLCTIV 9
DB      158 FAFKDLFV 166

RESULT 50
; US-09-491-577-96
; Sequence 96, Application US/09491577
; Patent No. 6610511
; GENERAL INFORMATION:
; APPLICANT: Yale University
; APPLICANT: Carlson, John R.
; APPLICANT: Kim, Hunhyong
; APPLICANT: Clyne, Peter J.
; APPLICANT: Warr, Coral G.
```

/ TITLE OF INVENTION: No. 6610511e1 Family of Odorant Receptor Genes in Drosophila
/ FILE REFERENCE: 44574-5061-US
/ CURRENT APPLICATION NUMBER: US/09/491,577
/ CURRENT FILING DATE: 2000-01-25
/ EARLIER APPLICATION NUMBER: US 60/117,132
/ EARLIER FILING DATE: 1999-01-25
/ NUMBER OF SEQ ID NOS: 112
/ SOFTWARE: Patentin Ver. 2.1
/ SEQ ID NO 96
/ LENGTH: 349
/ TYPE: PRT
/ ORGANISM: Drosophila melanogaster
/ US-09-491-577-96

Query Match 68.8%; Score 33; DB 2; Length 349;
Best Local Similarity 57.1%; Pred. No. 2.2e+02;
Matches 4; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 3 FRDLCLV 9
: ||||: :
Db 301 YRDLCVI 307

Search completed: May 5, 2006, 05:36:23
Job time : 24.7 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 08:29:07 ; Search time 56 Seconds
(without alignments)
67.151 Million cell updates/sec

Title: US-08-170-344-10
Perfect score: 48
Sequence: 1 PAFRDLCTV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues
Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database :
1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
4: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*
6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	48	100.0	9	3	US-09-909-460-103	Sequence 103, App
2	48	100.0	9	3	US-09-872-836-103	Sequence 103, App
3	48	100.0	9	4	US-10-128-711-67	Sequence 67, Appl
4	48	100.0	9	4	US-10-133-210-281	Sequence 281, App
5	48	100.0	9	5	US-10-758-970-103	Sequence 103, App
6	48	100.0	9	5	US-10-751-845-57	Sequence 57, Appl
7	48	100.0	15	4	US-10-476-570-29	Sequence 29, Appl
8	48	100.0	22	5	US-10-858-384-6	Sequence 6, Appl
9	48	100.0	24	5	US-10-751-845-65	Sequence 65, Appl
10	48	100.0	117	5	US-10-177-390-6	Sequence 6, Appl
11	48	100.0	151	5	US-10-484-063-20	Sequence 20, Appl
12	48	100.0	151	5	US-10-484-063-27	Sequence 27, Appl
13	48	100.0	151	5	US-10-858-384-2	Sequence 2, Appl
14	48	100.0	158	5	US-10-367-057-16	Sequence 16, Appl
15	48	100.0	158	6	US-11-021-949-13	Sequence 13, Appl
16	48	100.0	171	4	US-10-472-724-2	Sequence 2, Appl
17	48	100.0	236	5	US-10-751-845-157	Sequence 157, App
18	48	100.0	236	5	US-10-751-845-158	Sequence 158, App
19	48	100.0	237	5	US-11-072-288-1	Sequence 1, Appl
20	48	100.0	243	6	US-10-751-845-160	Sequence 160, App
21	48	100.0	261	5	US-09-367-309A-1	Sequence 1, Appl
22	48	100.0	266	3	US-10-000-903-4	Sequence 4, Appl
23	48	100.0	273	5	US-10-899-771-4	Sequence 4, Appl
24	48	100.0	273	5	US-10-000-903-10	Sequence 10, Appl
25	48	100.0	292	5	US-10-899-771-10	Sequence 10, Appl
26	48	100.0	371	4	US-10-000-903-6	Sequence 6, Appl
27	48	100.0	371	4	US-10-000-903-6	Sequence 6, Appl

28	48	100.0	371	5	US-10-899-771-6	Sequence 6, Appl
29	48	100.0	390	4	US-10-000-903-14	Sequence 14, Appl
30	48	100.0	390	5	US-10-899-771-14	Sequence 14, Appl
31	48	100.0	536	4	US-10-367-095-10	Sequence 10, Appl
32	48	100.0	536	4	US-10-368-046-10	Sequence 10, Appl
33	48	100.0	536	4	US-10-367-367-10	Sequence 10, Appl
34	48	100.0	536	5	US-10-918-337-10	Sequence 10, Appl
35	45	93.8	158	6	US-11-021-949-29	Sequence 29, Appl
36	44	91.7	9	5	US-10-751-845-89	Sequence 89, Appl
37	42	87.5	148	6	US-11-021-949-19	Sequence 19, Appl
38	42	87.5	148	6	US-11-021-949-359	Sequence 359, App
39	40	83.3	10	5	US-10-484-063-5	Sequence 5, Appl
40	40	83.3	10	5	US-10-751-845-94	Sequence 94, Appl
41	37	77.1	161	5	US-10-472-533-388	Sequence 388, App
42	37	77.1	161	4	US-10-351-334-160	Sequence 160, App
43	37	77.1	205	4	US-10-264-237-2326	Sequence 320, App
44	37	77.1	207	4	US-10-351-334-320	Sequence 320, App
45	37	77.1	242	4	US-10-425-115-251824	Sequence 251824, A
46	37	77.1	445	4	US-10-839-882-8	Sequence 8, Appl
47	37	77.1	459	5	US-10-450-763-40696	Sequence 40696, A
48	37	77.1	471	5	US-10-896-169-6	Sequence 6, Appl
49	37	77.1	473	4	US-10-437-963-179845	Sequence 179845, A
50	37	77.1	492	3	US-09-978-295A-7	Sequence 7, Appl
51	37	77.1	492	3	US-09-978-697-7	Sequence 7, Appl
52	37	77.1	492	3	US-09-978-192A-7	Sequence 7, Appl
53	37	77.1	492	3	US-09-999-832A-7	Sequence 7, Appl
54	37	77.1	492	3	US-09-978-189-7	Sequence 7, Appl
55	37	77.1	492	3	US-09-978-608A-7	Sequence 7, Appl
56	37	77.1	492	3	US-09-978-585A-7	Sequence 7, Appl
57	37	77.1	492	3	US-09-978-191A-7	Sequence 7, Appl
58	37	77.1	492	3	US-09-978-403A-7	Sequence 7, Appl
59	37	77.1	492	3	US-09-978-564A-7	Sequence 7, Appl
60	37	77.1	492	3	US-09-999-833A-7	Sequence 7, Appl
61	37	77.1	492	3	US-09-981-91A-7	Sequence 7, Appl
62	37	77.1	492	3	US-09-978-824-7	Sequence 7, Appl
63	37	77.1	492	3	US-09-918-834A-7	Sequence 7, Appl
64	37	77.1	492	3	US-09-999-834A-7	Sequence 7, Appl
65	37	77.1	492	3	US-09-978-423A-7	Sequence 7, Appl
66	37	77.1	492	3	US-09-978-199A-7	Sequence 7, Appl
67	37	77.1	492	3	US-09-999-830A-7	Sequence 7, Appl
68	37	77.1	492	3	US-09-978-187B-7	Sequence 7, Appl
69	37	77.1	492	3	US-09-978-157A-7	Sequence 7, Appl
70	37	77.1	492	3	US-09-978-643A-7	Sequence 7, Appl
71	37	77.1	492	3	US-09-978-375A-7	Sequence 7, Appl
72	37	77.1	492	3	US-09-978-298A-7	Sequence 7, Appl
73	37	77.1	492	3	US-09-978-188A-7	Sequence 7, Appl
74	37	77.1	492	3	US-09-978-681A-7	Sequence 7, Appl
75	37	77.1	492	3	US-09-978-194A-7	Sequence 7, Appl
76	37	77.1	492	3	US-09-999-829A-7	Sequence 7, Appl
77	37	77.1	492	3	US-09-978-299A-7	Sequence 7, Appl
78	37	77.1	492	3	US-09-978-544A-7	Sequence 7, Appl
79	37	77.1	492	3	US-09-978-665A-7	Sequence 7, Appl
80	37	77.1	492	3	US-09-978-802A-7	Sequence 7, Appl
81	37	77.1	492	3	US-09-999-831A-7	Sequence 7, Appl
82	37	77.1	492	3	US-09-978-824-7	Sequence 7, Appl
83	37	77.1	492	3	US-10-017-081A-7	Sequence 7, Appl
84	37	77.1	492	4	US-10-167-749-7	Sequence 7, Appl
85	37	77.1	492	4	US-10-013-921A-7	Sequence 7, Appl
86	37	77.1	492	4	US-10-013-929A-7	Sequence 7, Appl
87	37	77.1	492	4	US-10-016-177A-7	Sequence 7, Appl
88	37	77.1	492	4	US-10-166-709A-7	Sequence 7, Appl
89	37	77.1	492	4	US-10-143-031A-7	Sequence 7, Appl
90	37	77.1	492	4	US-10-143-030A-7	Sequence 7, Appl
91	37	77.1	492	4	US-10-002-967A-7	Sequence 7, Appl
92	37	77.1	492	4	US-10-017-083A-7	Sequence 7, Appl
93	37	77.1	492	4	US-10-145-128A-7	Sequence 7, Appl
94	37	77.1	492	4	US-10-210-951-16	Sequence 16, Appl
95	37	77.1	492	4	US-10-017-191A-7	Sequence 7, Appl
96	37	77.1	492	4	US-10-211-884-16	Sequence 16, Appl
97	37	77.1	492	4	US-10-143-028A-7	Sequence 7, Appl
98	37	77.1	492	4	US-10-143-029A-7	Sequence 7, Appl
99	37	77.1	492	4	US-10-145-089A-7	Sequence 7, Appl
100	37	77.1	492	4	US-10-165-067A-7	Sequence 7, Appl

101	37	77.1	492	4	US-10-145-017A-7	Sequence 7, Appl1	174	34	70.8	179	5	US-10-732-923-5146	Sequence 6146, Ap
102	37	77.1	492	4	US-10-164-728A-7	Sequence 7, Appl1	175	34	70.8	184	4	US-10-767-701-45523	Sequence 45523, A
103	37	77.1	492	4	US-10-013-926A-7	Sequence 7, Appl1	176	34	70.8	216	4	US-10-767-701-56568	Sequence 56568, A
104	37	77.1	492	4	US-10-165-247A-7	Sequence 7, Appl1	177	34	70.8	238	4	US-10-424-599-202518	Sequence 202518, A
105	37	77.1	492	4	US-10-145-124A-7	Sequence 7, Appl1	178	34	70.8	254	4	US-10-425-114-66907	Sequence 66907, A
106	37	77.1	492	4	US-10-160-502A-7	Sequence 7, Appl1	179	34	70.8	263	3	US-09-347-064-10	Sequence 10, Appl1
107	37	77.1	492	4	US-10-145-087A-7	Sequence 7, Appl1	180	34	70.8	263	5	US-10-499-297-4	Sequence 4, Appl1
108	37	77.1	492	4	US-10-017-086A-7	Sequence 7, Appl1	181	34	70.8	263	6	US-11-042-707-6	Sequence 6, Appl1
109	37	77.1	492	4	US-10-164-829A-7	Sequence 7, Appl1	182	34	70.8	264	6	US-11-042-707-3	Sequence 3, Appl1
110	37	77.1	492	4	US-10-164-929A-7	Sequence 7, Appl1	183	34	70.8	264	6	US-11-042-707-7	Sequence 7, Appl1
111	37	77.1	492	4	US-10-013-922A-7	Sequence 7, Appl1	184	34	70.8	264	6	US-11-042-707-8	Sequence 8, Appl1
112	37	77.1	492	4	US-10-020-445A-7	Sequence 7, Appl1	185	34	70.8	264	6	US-11-042-707-9	Sequence 9, Appl1
113	37	77.1	492	4	US-10-013-924A-7	Sequence 7, Appl1	186	34	70.8	264	6	US-11-042-707-10	Sequence 10, Appl1
114	37	77.1	492	4	US-10-017-084A-7	Sequence 7, Appl1	187	34	70.8	264	6	US-11-042-707-11	Sequence 11, Appl1
115	37	77.1	492	4	US-10-145-016A-7	Sequence 7, Appl1	188	34	70.8	267	3	US-09-347-064-4	Sequence 4, Appl1
116	37	77.1	492	4	US-10-145-088A-7	Sequence 7, Appl1	189	34	70.8	298	4	US-10-425-115-339851	Sequence 239851, A
117	37	77.1	492	4	US-10-145-092A-7	Sequence 7, Appl1	190	34	70.8	349	5	US-10-733-930-7212	Sequence 7212, Ap
118	37	77.1	492	4	US-10-145-129A-7	Sequence 7, Appl1	191	34	70.8	476	4	US-10-425-114-36803	Sequence 36803, A
119	37	77.1	492	4	US-10-145-129A-7	Sequence 7, Appl1	192	34	70.8	482	4	US-10-425-114-65115	Sequence 65115, A
120	37	77.1	492	4	US-10-165-038A-7	Sequence 7, Appl1	193	34	70.8	497	4	US-10-425-114-65121	Sequence 65121, A
121	37	77.1	492	4	US-10-165-353A-7	Sequence 7, Appl1	194	34	70.8	531	6	US-11-042-707-4	Sequence 4, Appl1
122	37	77.1	492	4	US-10-167-600-7	Sequence 7, Appl1	195	34	70.8	533	6	US-11-042-707-1	Sequence 1, Appl1
123	37	77.1	492	4	US-10-170-481A-7	Sequence 7, Appl1	196	34	70.8	534	6	US-11-042-707-10	Sequence 10, Appl1
124	37	77.1	492	4	US-10-172-039A-7	Sequence 7, Appl1	197	34	70.8	543	4	US-10-425-115-336705	Sequence 336705, A
125	37	77.1	492	4	US-10-210-028-7	Sequence 7, Appl1	198	34	70.8	552	4	US-10-425-115-335827	Sequence 335827, A
126	37	77.1	492	4	US-10-017-085A-7	Sequence 7, Appl1	199	34	70.8	647	5	US-10-499-297-6	Sequence 6, Appl1
127	37	77.1	492	4	US-10-013-918A-7	Sequence 7, Appl1	200	34	70.8	1792	4	US-10-437-963-164805	Sequence 164805, A
128	37	77.1	492	4	US-10-013-918A-7	Sequence 7, Appl1	201	33	68.8	72	4	US-10-425-115-291553	Sequence 291553, A
129	37	77.1	492	4	US-10-162-521A-7	Sequence 7, Appl1	202	33	68.8	76	4	US-10-425-115-219668	Sequence 219668, A
130	37	77.1	492	4	US-10-211-855-16	Sequence 16, Appl1	203	33	68.8	149	6	US-11-021-949-14	Sequence 14, Appl1
131	37	77.1	492	4	US-10-013-928A-7	Sequence 7, Appl1	204	33	68.8	158	5	US-10-800-023-27	Sequence 27, Appl1
132	37	77.1	492	4	US-10-162-522A-7	Sequence 7, Appl1	205	33	68.8	158	6	US-11-021-949-28	Sequence 28, Appl1
133	37	77.1	492	4	US-10-013-923A-7	Sequence 7, Appl1	206	33	68.8	172	4	US-10-472-963-146874	Sequence 146874, A
134	37	77.1	492	4	US-10-013-925A-7	Sequence 7, Appl1	207	33	68.8	179	4	US-10-282-122A-53487	Sequence 53487, A
135	37	77.1	492	4	US-10-013-927A-7	Sequence 7, Appl1	208	33	68.8	197	4	US-10-425-115-296437	Sequence 296437, A
136	37	77.1	492	4	US-10-145-093A-7	Sequence 7, Appl1	209	33	68.8	201	4	US-10-424-599-217144	Sequence 217144, A
137	37	77.1	492	4	US-10-013-919A-7	Sequence 7, Appl1	210	33	68.8	219	4	US-10-000-903-21	Sequence 21, Appl1
138	37	77.1	492	4	US-10-013-920A-7	Sequence 7, Appl1	211	33	68.8	278	4	US-10-899-771-21	Sequence 21, Appl1
139	37	77.1	492	4	US-10-164-749A-7	Sequence 7, Appl1	212	33	68.8	278	5	US-10-601-309-26	Sequence 26, Appl1
140	37	77.1	492	4	US-10-013-917A-7	Sequence 7, Appl1	213	33	68.8	349	4	US-10-437-963-120363	Sequence 120363, A
141	37	77.1	492	5	US-10-152-388B-7	Sequence 7, Appl1	214	33	68.8	383	4	US-10-000-903-33	Sequence 33, Appl1
142	37	77.1	492	5	US-10-169-596A-2	Sequence 2, Appl1	215	33	68.8	383	5	US-10-899-771-23	Sequence 23, Appl1
143	37	77.1	492	5	US-10-918-851-7	Sequence 7, Appl1	216	33	68.8	415	5	US-10-472-963-4440	Sequence 4440, Ap
144	37	77.1	492	5	US-10-805-687-7	Sequence 7, Appl1	217	33	68.8	417	4	US-10-437-963-000749	Sequence 000749, A
145	37	77.1	492	5	US-10-897-359-7	Sequence 7, Appl1	218	33	68.8	430	4	US-10-437-963-120363	Sequence 120363, A
146	37	77.1	492	5	US-10-893-802-7	Sequence 7, Appl1	219	33	68.8	614	4	US-10-365-493-5731	Sequence 5731, Ap
147	37	77.1	492	5	US-10-897-360-7	Sequence 7, Appl1	220	33	68.8	765	6	US-11-097-143-32121	Sequence 32121, A
148	37	77.1	492	5	US-10-367-057-48	Sequence 48, Appl1	221	33	68.8	946	4	US-10-437-963-183815	Sequence 183815, A
149	37	77.1	492	5	US-10-489-125B-3	Sequence 3, Appl1	222	32	66.7	15	4	US-10-186-229-137	Sequence 137, App
150	37	77.1	492	5	US-10-165-036A-7	Sequence 7, Appl1	223	32	66.7	15	4	US-10-476-570-30	Sequence 30, Appl1
151	37	77.1	492	6	US-11-129-762-7	Sequence 7, Appl1	224	32	66.7	15	5	US-10-149-835C-231	Sequence 231, App
152	37	77.1	494	4	US-10-425-114-49414	Sequence 49414, A	225	32	66.7	21	4	US-10-476-570-24	Sequence 24, Appl1
153	37	77.1	495	4	US-10-425-114-67151	Sequence 67151, A	226	32	66.7	22	4	US-10-476-570-26	Sequence 26, Appl1
154	37	77.1	495	4	US-10-425-114-67152	Sequence 67152, A	227	32	66.7	22	4	US-10-476-570-27	Sequence 27, Appl1
155	36	75.0	54	4	US-10-425-115-314295	Sequence 314295, A	228	32	66.7	56	4	US-10-425-115-304718	Sequence 304718, A
156	36	75.0	401	6	US-11-097-143-24288	Sequence 24288, A	229	32	66.7	63	4	US-10-424-599-251260	Sequence 251260, A
157	36	75.0	439	6	US-11-097-143-28941	Sequence 28941, A	230	32	66.7	73	4	US-10-424-599-271489	Sequence 271489, A
158	36	75.0	456	6	US-10-169-596A-16	Sequence 16, Appl1	231	32	66.7	82	4	US-10-424-599-146636	Sequence 146636, A
159	36	75.0	492	5	US-10-437-963-159275	Sequence 159275, A	232	32	66.7	95	4	US-10-424-599-770141	Sequence 770141, A
160	36	75.0	188	3	US-09-791-279-154	Sequence 154, App	233	32	66.7	95	4	US-10-425-114-44444	Sequence 44444, A
161	35	72.9	1278	4	US-10-381-333-4	Sequence 4, Appl1	234	32	66.7	124	4	US-10-767-701-60340	Sequence 60340, A
162	35	72.9	1294	3	US-09-836-499-2	Sequence 2, Appl1	235	32	66.7	134	4	US-10-424-599-254319	Sequence 254319, A
163	35	72.9	1294	3	US-10-162-435-2	Sequence 2, Appl1	236	32	66.7	149	6	US-11-021-949-18	Sequence 18, Appl1
164	35	72.9	1294	3	US-10-860-479-2	Sequence 2, Appl1	237	32	66.7	153	4	US-10-424-599-265092	Sequence 265092, A
165	35	72.9	1309	5	US-09-836-499-5	Sequence 5, Appl1	238	32	66.7	160	6	US-11-021-949-32	Sequence 32, Appl1
166	35	72.9	1309	5	US-09-836-499-5	Sequence 5, Appl1	239	32	66.7	180	4	US-10-425-115-296908	Sequence 296908, A
167	35	72.9	1309	5	US-10-162-435-5	Sequence 5, Appl1	240	32	66.7	182	4	US-10-425-115-338847	Sequence 338847, A
168	35	72.9	1309	5	US-10-860-779-5	Sequence 5, Appl1	241	32	66.7	198	4	US-10-102-204B-44	Sequence 44, Appl1
169	35	72.9	1898	5	US-10-450-763-36403	Sequence 36403, A	242	32	66.7	202	4	US-10-276-774-1361	Sequence 1361, Ap
170	34	70.8	84	4	US-10-425-115-248153	Sequence 248153, A	243	32	66.7	227	4	US-10-425-115-41152	Sequence 41152, A
171	34	70.8	118	4	US-10-424-599-202530	Sequence 202530, A	244	32	66.7	229	4	US-10-425-114-66358	Sequence 66358, A
172	34	70.8	154	4	US-10-425-115-336701	Sequence 336701, A	245	32	66.7	321	4	US-10-425-115-202080	Sequence 202080, A
173	34	70.8	160	4	US-10-425-115-251236	Sequence 251236, A	246	32	66.7	329	4	US-10-282-122A-69803	Sequence 69803, A

247	32	66.7	397	4	US-10-437-963-108417	Sequence 108417, Ap	31	64.6	248	5	US-10-128-558-233	Sequence 233, Ap
248	32	66.7	458	3	US-09-862-767A-9	Sequence 9, Appl	31	64.6	279	4	US-10-425-33803	Sequence 33803, Ap
249	32	66.7	515	4	US-10-437-963-191393	Sequence 191393, Ap	31	64.6	311	5	US-10-473-519-2	Sequence 2, Appl
250	32	66.7	526	6	US-11-097-143-8034	Sequence 8034, Ap	31	64.6	313	4	US-10-306-762-69	Sequence 69, Appl
251	32	66.7	527	4	US-10-425-114-71444	Sequence 71444, A	31	64.6	314	5	US-10-128-558-404	Sequence 404, Ap
252	32	66.7	527	4	US-10-450-763-55320	Sequence 55320, A	31	64.6	314	6	US-11-097-143-24477	Sequence 24477, A
253	32	66.7	563	5	US-10-349-528-15	Sequence 15, Appl	31	64.6	343	4	US-10-425-115-333825	Sequence 333825, Ap
254	32	66.7	597	4	US-10-425-115-266657	Sequence 266657, A	31	64.6	344	4	US-10-425-115-312190	Sequence 312190, Ap
255	32	66.7	598	6	US-11-097-143-41637	Sequence 41637, A	31	64.6	345	4	US-10-437-963-139966	Sequence 139966, Ap
256	32	66.7	604	4	US-10-292-798-1170	Sequence 1170, Ap	31	64.6	345	4	US-10-437-963-139966	Sequence 139966, Ap
257	32	66.7	607	4	US-10-425-115-268659	Sequence 268659, A	31	64.6	370	4	US-10-425-114-46361	Sequence 46361, A
258	32	66.7	620	4	US-10-425-114-55701	Sequence 55701, A	31	64.6	370	4	US-10-437-963-1398947	Sequence 1398947, Ap
259	32	66.7	633	3	US-10-382-248-10	Sequence 10, Appl	31	64.6	453	4	US-10-369-493-120281	Sequence 120281, A
260	32	66.7	675	3	US-09-877-804-7	Sequence 7, Appl	31	64.6	467	4	US-10-369-493-21038	Sequence 21038, A
261	32	66.7	675	5	US-10-425-115-202079	Sequence 202079, A	31	64.6	481	4	US-10-425-115-312192	Sequence 312192, A
262	32	66.7	675	5	US-10-755-190-7	Sequence 7, Appl	31	64.6	542	3	US-09-529-063-10	Sequence 10, Appl
263	32	66.7	685	4	US-10-751-699-13	Sequence 13, Appl	31	64.6	542	4	US-10-114-893-178	Sequence 178, Appl
264	32	66.7	685	5	US-10-921-772A-13	Sequence 5, Appl	31	64.6	542	4	US-10-414-378-10	Sequence 10, Appl
265	32	66.7	687	3	US-09-965-536A-13	Sequence 13, Appl	31	64.6	542	5	US-10-450-186-50	Sequence 50, Appl
266	32	66.7	688	3	US-09-965-536A-12	Sequence 12, Appl	31	64.6	542	5	US-10-501-282-4754	Sequence 4754, Ap
267	32	66.7	692	3	US-09-877-804-6	Sequence 6, Appl	31	64.6	673	5	US-10-501-282-4756	Sequence 4756, Ap
268	32	66.7	692	3	US-09-965-536A-11	Sequence 11, Appl	31	64.6	678	5	US-10-501-282-4758	Sequence 4758, Ap
269	32	66.7	692	5	US-10-755-190-6	Sequence 6, Appl	31	64.6	755	4	US-10-501-282-4758	Sequence 4758, Ap
270	32	66.7	693	3	US-09-965-536A-14	Sequence 14, Appl	31	64.6	812	4	US-10-416-588-2	Sequence 2, Appl
271	32	66.7	695	3	US-09-804-626-8	Sequence 8, Appl	31	64.6	863	4	US-10-298-122-5	Sequence 5, Appl
272	32	66.7	695	4	US-10-425-567A-122	Sequence 122, Ap	31	64.6	879	4	US-10-292-798-454	Sequence 454, Ap
273	32	66.7	695	4	US-10-407-655-65	Sequence 65, Appl	31	64.6	881	3	US-09-982-736-2	Sequence 2, Appl
274	32	66.7	695	4	US-10-349-838A-2	Sequence 2, Appl	31	64.6	881	4	US-10-311-671-14	Sequence 14, Appl
275	32	66.7	695	4	US-10-349-838A-22	Sequence 22, Appl	31	64.6	881	6	US-11-100-583-14	Sequence 14, Appl
276	32	66.7	695	4	US-10-349-838A-24	Sequence 24, Appl	31	64.6	884	6	US-10-041-615-32	Sequence 32, Appl
277	32	66.7	695	4	US-10-349-838A-26	Sequence 26, Appl	31	64.6	900	6	US-11-097-143-8856	Sequence 8856, Ap
278	32	66.7	695	4	US-10-349-838A-30	Sequence 30, Appl	31	64.6	910	4	US-10-041-615-104	Sequence 104, Ap
279	32	66.7	695	4	US-10-349-838A-32	Sequence 32, Appl	31	64.6	925	5	US-09-816-685-2	Sequence 2, Appl
280	32	66.7	695	4	US-10-349-838A-34	Sequence 34, Appl	31	64.6	926	4	US-10-436-715-20	Sequence 20, Appl
281	32	66.7	695	5	US-10-349-838A-26	Sequence 26, Appl	31	64.6	926	4	US-10-639-708-2	Sequence 2, Appl
282	32	66.7	723	6	US-11-097-143-31989	Sequence 31989, A	31	64.6	926	4	US-10-283-65A-2	Sequence 4, Appl
283	32	66.7	726	4	US-10-282-122A-57462	Sequence 57462, A	31	64.6	926	4	US-10-283-65A-4	Sequence 4, Appl
284	32	66.7	726	4	US-10-437-963-197596	Sequence 197596, A	31	64.6	926	4	US-10-437-963-113781	Sequence 113781, A
285	32	66.7	1148	5	US-10-751-845-84	Sequence 84, Appl	31	64.6	926	4	US-10-437-963-113781	Sequence 113781, A
286	31	64.6	9	4	US-10-339-113A-291	Sequence 91, Ap	31	64.6	993	5	US-10-369-493-22570	Sequence 22570, A
287	31	64.6	10	4	US-10-751-845-92	Sequence 92, Appl	31	64.6	993	5	US-10-732-922-22717	Sequence 22717, A
288	31	64.6	15	5	US-10-484-063-4	Sequence 4, Appl	31	64.6	1150	5	US-10-424-599-255327	Sequence 255327, A
289	31	64.6	45	4	US-10-437-963-142535	Sequence 142535, A	31	64.6	1197	6	US-10-424-599-255325	Sequence 255325, A
290	31	64.6	69	4	US-10-425-115-306309	Sequence 306309, A	31	64.6	1235	4	US-10-424-599-255325	Sequence 255325, A
291	31	64.6	70	4	US-10-424-599-173852	Sequence 173852, A	31	64.6	1360	5	US-10-424-599-255325	Sequence 255325, A
292	31	64.6	72	4	US-10-424-599-177543	Sequence 177543, A	31	64.6	1379	4	US-10-437-963-113781	Sequence 113781, A
293	31	64.6	75	3	US-09-833-245-2015	Sequence 2015, Ap	31	64.6	1402	4	US-10-437-963-113781	Sequence 113781, A
294	31	64.6	75	4	US-10-266-829-54	Sequence 54, Appl	31	64.6	1409	4	US-10-437-963-113781	Sequence 113781, A
295	31	64.6	75	5	US-10-878-523-54	Sequence 54, Appl	31	64.6	1489	6	US-11-097-143-22739	Sequence 22739, A
296	31	64.6	77	4	US-10-425-115-266949	Sequence 266949, A	31	64.6	1589	6	US-10-186-222-346	Sequence 326, Ap
297	31	64.6	77	4	US-10-425-115-266949	Sequence 266949, A	31	64.6	18	4	US-10-149-835C-184	Sequence 384, Ap
298	31	64.6	78	4	US-10-425-115-244232	Sequence 244232, A	31	64.6	18	5	US-10-424-599-255327	Sequence 255327, A
299	31	64.6	79	4	US-10-425-115-207174	Sequence 207174, A	31	64.6	43	4	US-10-424-599-255325	Sequence 255325, A
300	31	64.6	84	4	US-10-424-599-215661	Sequence 215661, A	31	64.6	45	4	US-10-424-599-255325	Sequence 255325, A
301	31	64.6	91	4	US-10-424-599-259809	Sequence 259809, A	31	64.6	52	4	US-10-425-115-168762	Sequence 168762, A
302	31	64.6	93	4	US-10-425-115-342713	Sequence 342713, A	31	64.6	55	4	US-10-425-115-168762	Sequence 168762, A
303	31	64.6	99	4	US-10-437-963-108890	Sequence 108890, A	31	64.6	57	4	US-10-425-115-168762	Sequence 168762, A
304	31	64.6	116	4	US-10-437-963-108890	Sequence 108890, A	31	64.6	64	4	US-10-424-599-255327	Sequence 255327, A
305	31	64.6	131	4	US-10-425-115-348167	Sequence 348167, A	31	64.6	67	4	US-10-424-599-255327	Sequence 255327, A
306	31	64.6	139	4	US-10-425-115-348167	Sequence 348167, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
307	31	64.6	149	6	US-11-021-949-16	Sequence 16, Appl	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
308	31	64.6	158	6	US-10-767-701-44185	Sequence 44185, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
309	31	64.6	163	4	US-10-767-701-44185	Sequence 44185, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
310	31	64.6	165	4	US-10-424-599-250601	Sequence 250601, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
311	31	64.6	168	4	US-10-437-963-126241	Sequence 126241, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
312	31	64.6	180	4	US-10-029-386-34185	Sequence 34185, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
313	31	64.6	194	4	US-10-425-115-255085	Sequence 255085, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
314	31	64.6	195	4	US-10-312-354-30	Sequence 30, Appl	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
315	31	64.6	197	4	US-10-767-701-55061	Sequence 55061, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
316	31	64.6	227	4	US-10-437-963-114020	Sequence 114020, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
317	31	64.6	230	5	US-10-739-930-10049	Sequence 10049, A	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
318	31	64.6	248	4	US-10-094-749-3186	Sequence 3186, Ap	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A
319	31	64.6	248	4	US-10-264-237-2700	Sequence 2700, Ap	31	64.6	68	4	US-10-424-599-255327	Sequence 255327, A

393	30	62.5	102	3	US-09-864-761-43319	Sequence 43319, A	466	30	62.5	448	6	US-11-097-143-21489	Sequence 21489, A
394	30	62.5	103	4	US-10-424-599-187964	Sequence 187964, A	467	30	62.5	459	4	US-10-425-115-198689	Sequence 198689, A
395	30	62.5	103	5	US-10-723-860-1530	Sequence 1530, Ap	468	30	62.5	467	4	US-10-437-963-191926	Sequence 191926, A
396	30	62.5	103	5	US-10-826-788-2	Sequence 2, Appl1	469	30	62.5	474	3	US-09-213-678-4	Sequence 4, Appl1
397	30	62.5	104	4	US-10-029-386-28480	Sequence 28480, A	470	30	62.5	475	4	US-10-032-565-7211	Sequence 7211, Ap
398	30	62.5	105	4	US-10-437-963-105249	Sequence 105249, A	471	30	62.5	474	4	US-10-369-493-5656	Sequence 5656, Ap
399	30	62.5	106	4	US-10-425-115-323566	Sequence 323566, A	472	30	62.5	482	4	US-10-437-963-142416	Sequence 142416, A
400	30	62.5	111	4	US-10-092-947A-51	Sequence 51, Appl	473	30	62.5	509	4	US-10-425-115-191090	Sequence 191090, A
401	30	62.5	119	4	US-10-767-701-34087	Sequence 34087, A	474	30	62.5	513	4	US-10-437-963-162667	Sequence 162667, A
402	30	62.5	119	4	US-10-425-115-237191	Sequence 237191, A	475	30	62.5	558	4	US-10-437-963-142420	Sequence 142420, A
403	30	62.5	121	4	US-10-437-963-163019	Sequence 163019, A	476	30	62.5	564	6	US-11-097-143-14480	Sequence 14480, A
404	30	62.5	121	5	US-10-450-763-58082	Sequence 58082, A	477	30	62.5	597	5	US-10-211-028-15	Sequence 15, Appl1
405	30	62.5	125	4	US-10-425-114-50355	Sequence 50355, A	478	30	62.5	600	4	US-10-329-027-86	Sequence 26, Appl
406	30	62.5	129	4	US-10-424-599-247683	Sequence 247683, A	479	30	62.5	636	4	US-10-282-122A-46488	Sequence 46488, A
407	30	62.5	132	4	US-10-437-963-147708	Sequence 147708, A	480	30	62.5	662	4	US-10-437-963-174994	Sequence 174994, A
408	30	62.5	148	4	US-10-425-114-54671	Sequence 54671, A	481	30	62.5	670	4	US-10-369-493-34453	Sequence 2453, Ap
409	30	62.5	158	6	US-11-021-949-30	Sequence 30, Appl	482	30	62.5	686	4	US-10-032-565-7771	Sequence 7771, Ap
410	30	62.5	159	4	US-10-437-963-139003	Sequence 139003, A	483	30	62.5	688	3	US-09-801-368-378	Sequence 378, App
411	30	62.5	160	4	US-10-425-115-319206	Sequence 319206, A	484	30	62.5	688	4	US-10-369-493-22045	Sequence 22045, A
412	30	62.5	180	4	US-10-425-115-209532	Sequence 209532, A	485	30	62.5	713	4	US-10-128-714-3084	Sequence 3084, Ap
413	30	62.5	182	4	US-10-767-701-48042	Sequence 48042, A	486	30	62.5	722	4	US-10-128-714-8084	Sequence 8084, Ap
414	30	62.5	185	6	US-11-006-154-16	Sequence 16, Appl	487	30	62.5	722	4	US-10-369-493-3651	Sequence 3651, Ap
415	30	62.5	188	4	US-10-767-701-60914	Sequence 60914, A	488	30	62.5	760	4	US-10-437-963-159169	Sequence 159169, A
416	30	62.5	192	5	US-10-739-930-8174	Sequence 8174, Ap	489	30	62.5	817	4	US-10-437-963-151955	Sequence 151955, A
417	30	62.5	196	4	US-10-437-963-146223	Sequence 146223, A	490	30	62.5	829	6	US-11-097-143-17109	Sequence 17109, A
418	30	62.5	199	5	US-10-732-923-20954	Sequence 20954, A	491	30	62.5	831	5	US-10-489-425-98	Sequence 98, Appl
419	30	62.5	204	5	US-10-828-343-2	Sequence 2, Appl1	492	30	62.5	835	4	US-10-437-963-174997	Sequence 174997, A
420	30	62.5	213	4	US-10-425-115-368328	Sequence 368328, A	493	30	62.5	844	6	US-11-097-143-41496	Sequence 41496, A
421	30	62.5	215	4	US-10-437-963-193060	Sequence 193060, A	494	30	62.5	894	5	US-10-739-930-0213	Sequence 6213, Ap
422	30	62.5	215	4	US-10-767-701-43740	Sequence 43740, A	495	30	62.5	966	5	US-10-450-763-44547	Sequence 44547, A
423	30	62.5	215	4	US-10-425-115-226969	Sequence 226969, A	496	30	62.5	976	6	US-10-263-929-121	Sequence 121, App
424	30	62.5	218	4	US-10-289-762-282	Sequence 282, App	497	30	62.5	976	6	US-11-097-143-32997	Sequence 32997, A
425	30	62.5	228	4	US-10-437-963-111257	Sequence 111257, A	498	30	62.5	997	3	US-09-918-171A-7	Sequence 7, Appl1
426	30	62.5	228	4	US-10-425-115-221420	Sequence 221420, A	499	30	62.5	997	4	US-09-981-151A-32	Sequence 32, Appl
427	30	62.5	228	4	US-10-425-115-221423	Sequence 221423, A	500	30	62.5	997	4	US-10-408-765A-1094	Sequence 1094, Ap
428	30	62.5	234	4	US-10-437-963-193059	Sequence 193059, A	501	30	62.5	1062	5	US-10-015-115-58	Sequence 58, Appl
429	30	62.5	236	4	US-10-425-114-68301	Sequence 68301, A	502	30	62.5	1162	4	US-10-450-763-34265	Sequence 34265, A
430	30	62.5	236	4	US-10-425-115-300460	Sequence 300460, A	503	30	62.5	1171	4	US-10-425-115-235463	Sequence 235463, A
431	30	62.5	241	5	US-10-425-115-345849	Sequence 345849, A	504	30	62.5	1187	4	US-10-437-963-154172	Sequence 154172, A
432	30	62.5	241	5	US-10-732-923-17076	Sequence 17076, A	505	30	62.5	1189	3	US-10-437-963-183526	Sequence 183526, A
433	30	62.5	250	4	US-10-425-114-65472	Sequence 65472, A	506	30	62.5	1197	3	US-09-949-029-10	Sequence 20, Appl
434	30	62.5	252	4	US-10-425-115-226798	Sequence 226798, A	507	30	62.5	1219	6	US-11-097-143-1332	Sequence 1332, Ap
435	30	62.5	256	4	US-10-425-114-42426	Sequence 42426, A	508	30	62.5	1219	4	US-10-425-115-235471	Sequence 235471, A
436	30	62.5	257	4	US-10-425-114-58860	Sequence 58860, A	509	30	62.5	1228	4	US-10-425-115-235416	Sequence 235416, A
437	30	62.5	258	4	US-10-282-122A-52380	Sequence 52380, A	510	30	62.5	1240	4	US-10-425-115-235413	Sequence 235413, A
438	30	62.5	288	5	US-10-450-763-36489	Sequence 36489, A	511	30	62.5	1255	4	US-10-312-352-23	Sequence 23, Appl
439	30	62.5	292	4	US-10-437-963-110216	Sequence 110216, A	512	30	62.5	1265	5	US-10-450-763-38802	Sequence 38802, A
440	30	62.5	293	5	US-10-437-963-191463	Sequence 191463, A	513	30	62.5	1285	4	US-10-425-115-235426	Sequence 235426, A
441	30	62.5	293	5	US-10-450-763-45987	Sequence 45987, A	514	30	62.5	1287	4	US-10-437-963-135124	Sequence 135124, A
442	30	62.5	299	4	US-10-473-574-4	Sequence 4, Appl1	515	30	62.5	1288	4	US-10-332-696-15	Sequence 15, Appl
443	30	62.5	299	4	US-10-423-115-290068	Sequence 290068, A	516	30	62.5	1296	4	US-10-425-115-235461	Sequence 235461, A
444	30	62.5	299	5	US-10-504-582-161	Sequence 161, App	517	30	62.5	1305	4	US-10-425-115-235469	Sequence 235469, A
445	30	62.5	304	4	US-10-767-701-37599	Sequence 37599, A	518	30	62.5	1607	4	US-10-425-115-235421	Sequence 235421, A
446	30	62.5	308	4	US-10-437-963-191452	Sequence 191452, A	519	30	62.5	1612	4	US-10-437-963-181565	Sequence 181565, A
447	30	62.5	312	5	US-10-739-930-10251	Sequence 10251, A	520	30	62.5	1686	4	US-10-386-414-2	Sequence 2, Appl1
448	30	62.5	328	4	US-10-260-877-66	Sequence 66, Appl	521	30	62.5	1690	3	US-09-788-043C-5	Sequence 5, Appl1
449	30	62.5	336	4	US-10-423-114-60346	Sequence 60346, A	522	30	62.5	1777	4	US-10-425-115-235472	Sequence 235472, A
450	30	62.5	338	4	US-10-424-599-226859	Sequence 226859, A	523	30	62.5	1922	6	US-11-097-143-17685	Sequence 17685, A
451	30	62.5	351	4	US-10-437-963-202349	Sequence 202349, A	524	30	62.5	1936	5	US-10-745-237-88	Sequence 88, Appl
452	30	62.5	354	3	US-09-815-242-11794	Sequence 11794, A	525	30	62.5	2046	6	US-10-425-115-235423	Sequence 23434, A
453	30	62.5	354	4	US-10-282-122A-66194	Sequence 66194, A	526	30	62.5	2087	6	US-11-097-143-34134	Sequence 34134, A
454	30	62.5	366	4	US-10-425-115-368942	Sequence 368942, A	527	30	62.5	2637	4	US-10-424-599-256710	Sequence 256710, A
455	30	62.5	372	4	US-10-425-115-368942	Sequence 368942, A	528	30	62.5	2834	4	US-10-424-599-256711	Sequence 256711, A
456	30	62.5	387	4	US-10-739-930-6045	Sequence 6045, Ap	529	30	62.5	2906	4	US-10-015-115-60	Sequence 60, Appl
457	30	62.5	395	4	US-10-425-114-69744	Sequence 69744, A	530	30	62.5	2910	4	US-10-322-696-18	Sequence 18, Appl
458	30	62.5	396	5	US-10-450-763-34420	Sequence 34420, A	531	30	62.5	2911	3	US-09-825-751A-68	Sequence 68, Appl
459	30	62.5	399	4	US-10-425-115-226794	Sequence 226794, A	532	30	62.5	2911	4	US-10-295-027-162	Sequence 162, App
460	30	62.5	401	4	US-10-425-115-339516	Sequence 339516, A	533	30	62.5	2911	4	US-10-408-765A-421	Sequence 421, App
461	30	62.5	407	5	US-10-739-930-6656	Sequence 6656, Ap	534	30	62.5	2911	5	US-10-723-860-1021	Sequence 1021, Ap
462	30	62.5	419	4	US-10-425-115-226797	Sequence 226797, A	535	30	62.5	2911	5	US-10-851-438-88	Sequence 88, Appl
463	30	62.5	420	4	US-10-425-114-47959	Sequence 47959, A	536	30	62.5	2911	5	US-10-756-149-9966	Sequence 4966, Ap
464	30	62.5	427	4	US-10-425-115-339518	Sequence 339518, A	537	30	62.5	2912	5	US-10-450-763-36761	Sequence 36761, A
465	30	62.5	437	5	US-10-450-763-56483	Sequence 56483, A	538	30	62.5	7771	5	US-10-819-386A-6	Sequence 6, Appl1

539	-29	60.4	41	4	US-10-425-115-262173	Sequence 262173,
539	-29	60.4	46	4	US-10-425-115-234595	Sequence 234595,
541	29	60.4	47	4	US-10-425-115-345287	Sequence 345287,
532	29	60.4	48	4	US-10-425-115-218745	Sequence 218745,
533	29	60.4	49	4	US-10-437-963-176933	Sequence 176933,
544	29	60.4	51	4	US-10-424-599-150848	Sequence 150848,
545	29	60.4	55	4	US-10-083-357-982	Sequence 982, App
546	-29	60.4	58	4	US-10-425-115-312334	Sequence 312334,
547	-29	60.4	62	4	US-10-424-599-208600	Sequence 208600,
548	-29	60.4	62	4	US-10-437-963-149058	Sequence 149058,
549	-29	60.4	67	4	US-10-767-701-44692	Sequence 44692, A
550	29	60.4	71	4	US-10-424-599-165304	Sequence 165304,
551	-29	60.4	71	4	US-10-424-599-248897	Sequence 248897,
552	-29	60.4	72	4	US-10-425-114-48801	Sequence 48801, A
553	-29	60.4	74	4	US-10-424-599-160828	Sequence 160828,
554	-29	60.4	75	4	US-10-437-963-175685	Sequence 175685,
555	-29	60.4	75	4	US-10-425-115-346093	Sequence 346093,
556	-29	60.4	76	4	US-10-425-115-292535	Sequence 292535,
557	-29	60.4	77	4	US-10-424-599-185699	Sequence 185699,
558	-29	60.4	81	4	US-10-424-599-234774	Sequence 234774,
559	-29	60.4	82	4	US-10-425-114-50587	Sequence 50587, A
560	-29	60.4	82	4	US-10-425-115-341236	Sequence 341236,
561	-29	60.4	84	4	US-10-424-599-231604	Sequence 231604,
562	-29	60.4	84	4	US-10-425-115-230755	Sequence 230755,
563	-29	60.4	84	4	US-10-425-115-244096	Sequence 244096,
564	-29	60.4	85	4	US-10-425-115-224003	Sequence 224003,
565	-29	60.4	85	4	US-10-425-115-307454	Sequence 307454,
566	-29	60.4	86	4	US-10-083-357-790	Sequence 790, App
567	-29	60.4	87	4	US-10-424-599-185311	Sequence 185311,
568	-29	60.4	88	4	US-10-425-115-224012	Sequence 224012,
569	-29	60.4	88	4	US-10-425-115-362722	Sequence 362722,
570	-29	60.4	89	4	US-10-425-115-188326	Sequence 188326,
571	-29	60.4	93	4	US-10-424-599-194446	Sequence 194446,
572	-29	60.4	93	4	US-10-425-115-301489	Sequence 301489,
573	-29	60.4	94	4	US-10-437-963-185219	Sequence 185219,
574	-29	60.4	95	4	US-10-437-963-170849	Sequence 170849,
575	-29	60.4	101	4	US-10-425-115-234885	Sequence 234885,
576	-29	60.4	102	4	US-10-424-599-226663	Sequence 226663,
577	-29	60.4	103	4	US-10-424-599-266475	Sequence 266475,
578	-29	60.4	105	4	US-10-424-599-271584	Sequence 271584,
579	-29	60.4	108	4	US-10-282-1224-47443	Sequence 47443, A
580	-29	60.4	109	3	US-09-071-035-194	Sequence 194, App
581	-29	60.4	109	3	US-10-206-576-194	Sequence 194, App
582	-29	60.4	109	4	US-10-424-599-239039	Sequence 239039,
583	-29	60.4	109	5	US-10-912-362-194	Sequence 194, App
584	-29	60.4	120	4	US-10-425-115-362728	Sequence 362728,
585	-29	60.4	124	4	US-10-425-115-219121	Sequence 219121,
586	-29	60.4	125	4	US-10-424-599-156439	Sequence 156439,
587	-29	60.4	126	4	US-10-425-115-327147	Sequence 327147,
588	-29	60.4	129	4	US-10-424-599-169002	Sequence 169002,
589	-29	60.4	129	4	US-10-425-114-53781	Sequence 53781, A
590	-29	60.4	129	4	US-10-425-115-198103	Sequence 198103,
591	-29	60.4	134	4	US-10-767-701-44013	Sequence 44013, A
592	-29	60.4	135	4	US-10-425-115-309691	Sequence 309691,
593	-29	60.4	138	4	US-10-767-701-41316	Sequence 41316, A
594	-29	60.4	138	4	US-10-425-115-236063	Sequence 236063,
595	-29	60.4	139	5	US-10-450-763-59970	Sequence 59970, A
596	-29	60.4	140	4	US-10-425-115-288956	Sequence 288956,
597	-29	60.4	150	4	US-10-142-835-6	Sequence 6, App1
598	-29	60.4	150	6	US-11-061-925-6	Sequence 6, App1
599	-29	60.4	150	6	US-11-062-007-6	Sequence 6, App1
600	-29	60.4	152	4	US-10-425-115-361929	Sequence 361929,
601	-29	60.4	158	4	US-10-425-115-288961	Sequence 288961,
602	-29	60.4	158	4	US-10-425-115-340954	Sequence 340954,
603	-29	60.4	160	4	US-10-425-115-340954	Sequence 44622, A
604	-29	60.4	161	4	US-10-425-114-44628	Sequence 44628, A
605	-29	60.4	163	4	US-10-424-599-268652	Sequence 268652,
606	-29	60.4	166	4	US-10-767-701-36935	Sequence 36935, A
607	-29	60.4	168	4	US-10-425-114-44012	Sequence 44012, A
608	-29	60.4	183	4	US-10-425-114-4414	Sequence 44164, A
609	-29	60.4	183	4	US-10-425-115-337713	Sequence 337713,
610	-29	60.4	184	4	US-10-425-115-288955	Sequence 288955,
611	-29	60.4	187	5	US-10-450-763-33487	Sequence 43487, A
	-29	60.4	189	5	US-10-450-763-45433	Sequence 45433, A

612	29	60.4	193	4	US-10-425-114-43850	Sequence 43850, A
613	29	60.4	193	4	US-10-425-115-288954	Sequence 288954,
614	29	60.4	197	4	US-10-425-115-23850	Sequence 23850,
615	29	60.4	202	4	US-10-424-599-232101	Sequence 232101,
616	29	60.4	211	4	US-10-389-566-357	Sequence 357, App
617	29	60.4	220	4	US-10-425-115-350252	Sequence 350252,
618	29	60.4	221	4	US-10-425-114-44453	Sequence 44453, A
619	29	60.4	222	4	US-10-424-599-214648	Sequence 214648,
620	29	60.4	223	4	US-10-425-114-56058	Sequence 56058, A
621	29	60.4	228	4	US-10-767-701-43393	Sequence 43393, A
622	-29	60.4	229	4	US-10-424-599-163048	Sequence 163048,
623	-29	60.4	232	4	US-10-036-959B-14	Sequence 14, App1
624	-29	60.4	234	4	US-10-104-047-2791	Sequence 2791, Ap
625	-29	60.4	237	4	US-10-424-599-254790	Sequence 254790,
626	-29	60.4	245	4	US-10-425-114-44625	Sequence 44625, A
627	-29	60.4	245	4	US-10-425-114-51727	Sequence 51727, A
628	-29	60.4	247	4	US-10-424-599-232108	Sequence 232108,
629	-29	60.4	249	4	US-10-425-115-206403	Sequence 206403,
630	-29	60.4	250	4	US-10-425-115-288960	Sequence 288960,
631	-29	60.4	250	4	US-10-425-115-289577	Sequence 289577,
632	-29	60.4	254	4	US-10-374-780A-1705	Sequence 1705, Ap
633	-29	60.4	254	4	US-10-437-963-183507	Sequence 183507,
634	-29	60.4	257	4	US-10-425-114-44836	Sequence 44836, A
635	-29	60.4	257	4	US-10-425-114-49413	Sequence 49413, A
636	-29	60.4	264	4	US-10-425-114-44831	Sequence 44831, A
637	-29	60.4	264	4	US-10-425-114-72423	Sequence 72423, A
638	-29	60.4	266	4	US-10-425-114-44592	Sequence 44592,
639	-29	60.4	267	4	US-10-425-114-72390	Sequence 72390, A
640	-29	60.4	270	4	US-10-425-114-56027	Sequence 56027, A
641	-29	60.4	271	4	US-10-425-114-45044	Sequence 45044, A
642	-29	60.4	273	4	US-10-424-599-144205	Sequence 144205,
643	-29	60.4	273	4	US-10-425-114-44461	Sequence 44461, A
644	-29	60.4	273	4	US-10-425-114-44574	Sequence 44574, A
645	-29	60.4	273	4	US-10-425-114-44819	Sequence 44819, A
646	-29	60.4	273	4	US-10-425-114-45666	Sequence 45666, A
647	-29	60.4	273	4	US-10-425-114-58431	Sequence 58431, A
648	-29	60.4	273	4	US-10-425-114-71925	Sequence 71925, A
649	-29	60.4	273	4	US-10-425-114-71932	Sequence 71932, A
650	-29	60.4	273	4	US-10-425-114-71991	Sequence 71991, A
651	-29	60.4	273	4	US-10-767-701-44012	Sequence 44012, A
652	-29	60.4	274	4	US-10-425-115-339256	Sequence 339256,
653	-29	60.4	274	4	US-10-425-114-42938	Sequence 42938, A
654	-29	60.4	274	4	US-10-425-114-43786	Sequence 43786, A
655	-29	60.4	274	4	US-10-425-114-43799	Sequence 43799, A
656	-29	60.4	274	4	US-10-425-114-44043	Sequence 44043, A
657	-29	60.4	274	4	US-10-425-114-44539	Sequence 44539, A
658	-29	60.4	274	4	US-10-425-114-44567	Sequence 44567, A
659	-29	60.4	274	4	US-10-425-114-44741	Sequence 44741, A
660	-29	60.4	274	4	US-10-425-114-45889	Sequence 45889, A
661	-29	60.4	274	4	US-10-425-114-46290	Sequence 46290, A
662	-29	60.4	274	4	US-10-425-114-53375	Sequence 53375, A
663	-29	60.4	274	4	US-10-425-114-53383	Sequence 53383, A
664	-29	60.4	274	4	US-10-425-114-53390	Sequence 53390, A
665	-29	60.4	274	4	US-10-425-114-71934	Sequence 71934, A
666	-29	60.4	274	4	US-10-425-114-71937	Sequence 71937, A
667	-29	60.4	274	4	US-10-425-114-71948	Sequence 71948, A
668	-29	60.4	274	4	US-10-425-114-71964	Sequence 71964, A
669	-29	60.4	274	4	US-10-425-114-71974	Sequence 71974, A
670	-29	60.4	274	4	US-10-425-114-72025	Sequence 72025, A
671	-29	60.4	275	4	US-10-425-114-51487	Sequence 51487, A
672	-29	60.4	276	4	US-10-424-599-218297	Sequence 218297,
673	-29	60.4	276	4	US-10-425-114-44423	Sequence 44423, A
674	-29	60.4	276	4	US-10-425-114-44432	Sequence 44432, A
675	-29	60.4	276	4	US-10-425-114-55546	Sequence 55546, A
676	-29	60.4	276	4	US-10-425-114-63726	Sequence 63726, A
677	-29	60.4	277	4	US-10-425-114-46632	Sequence 46632, A
678	-29	60.4	277	4	US-10-437-963-126701	Sequence 126701,
679	-29	60.4	278	4	US-10-425-114-46338	Sequence 46338, A
680	-29	60.4	278	4	US-10-437-963-120194	Sequence 120194,
681	-29	60.4	281	6	US-11-097-143-12579	Sequence 12579, A
682	-29	60.4	285	4	US-10-276-774-1748	Sequence 1748, Ap
683	-29	60.4	290	4	US-10-425-114-50384	Sequence 50384, A
684	-29	60.4	291	4	US-10-437-963-189875	Sequence 189875,

685	29	60.4	295	4	US-10-425-115-191488	Sequence 191488,	758	29	60.4	429	4	US-10-424-599-254789	Sequence 254789,
686	29	60.4	296	5	US-10-732-923-17850	Sequence 17850, A	759	29	60.4	450	4	US-10-425-115-34683	Sequence 34683, A
687	29	60.4	297	4	US-10-369-493-6885	Sequence 6885, Ap	760	29	60.4	453	4	US-10-369-493-11338	Sequence 11338, A
688	29	60.4	298	4	US-10-424-599-214184	Sequence 214184,	761	29	60.4	468	4	US-10-437-963-120182	Sequence 120192, A
689	29	60.4	299	4	US-10-425-114-45789	Sequence 45789, A	762	29	60.4	473	4	US-10-439-741-16	Sequence 741-16, Appl
690	29	60.4	300	4	US-10-183-114-71	Sequence 71, Appl	763	29	60.4	478	4	US-10-437-963-192702	Sequence 192702, A
691	29	60.4	301	5	US-10-957-135-71	Sequence 71, Appl	764	29	60.4	494	4	US-10-424-599-170281	Sequence 170281, A
692	29	60.4	301	5	US-10-957-135-71	Sequence 71, Appl	765	29	60.4	499	4	US-10-437-963-192377	Sequence 192377, A
693	29	60.4	301	6	US-11-083-611-71	Sequence 71, Appl	766	29	60.4	508	4	US-10-369-493-3140	Sequence 3140, Ap
694	29	60.4	302	5	US-10-972-024-448	Sequence 448, Appl	767	29	60.4	514	4	US-10-357-820-28	Sequence 28, Appl
695	29	60.4	303	3	US-09-832-522-59	Sequence 59, Appl	768	29	60.4	518	4	US-10-223-076-11	Sequence 11, Appl
696	29	60.4	308	4	US-10-025-806-118	Sequence 118, Appl	769	29	60.4	526	6	US-11-097-143-3255	Sequence 3255, Ap
697	29	60.4	308	4	US-10-425-114-65269	Sequence 65269, A	770	29	60.4	529	4	US-10-282-122A-64288	Sequence 64288, A
698	29	60.4	309	4	US-10-219-834-14	Sequence 14, Appl	771	29	60.4	540	4	US-10-369-493-13582	Sequence 13582, A
699	29	60.4	309	4	US-10-292-798-28	Sequence 28, Appl	772	29	60.4	547	4	US-10-332-447-29	Sequence 29, Appl
700	29	60.4	309	4	US-10-072-012-406	Sequence 406, Appl	773	29	60.4	547	4	US-10-332-447-29	Sequence 30, Appl
701	29	60.4	309	4	US-10-343-650A-286	Sequence 286, Appl	774	29	60.4	547	4	US-10-332-447-29	Sequence 30, Appl
702	29	60.4	309	4	US-10-311-196-4	Sequence 4, Appl	775	29	60.4	551	4	US-10-437-963-186364	Sequence 186364, A
703	29	60.4	312	5	US-10-774-355A-1909	Sequence 1909, Ap	776	29	60.4	555	3	US-09-890-813-8	Sequence 8, Appl
704	29	60.4	314	4	US-10-343-650A-512	Sequence 512, Appl	777	29	60.4	567	6	US-11-097-143-39424	Sequence 39424, A
705	29	60.4	315	3	US-09-886-055-231	Sequence 231, Appl	778	29	60.4	580	6	US-11-097-143-6696	Sequence 6696, Ap
706	29	60.4	315	3	US-09-804-291-231	Sequence 231, Appl	779	29	60.4	581	4	US-10-369-493-17186	Sequence 17186, A
707	29	60.4	315	3	US-09-832-522-14	Sequence 14, Appl	780	29	60.4	599	3	US-09-952-033A-4	Sequence 4, Appl
708	29	60.4	315	4	US-10-387-629-66	Sequence 66, Appl	781	29	60.4	602	4	US-10-369-493-5869	Sequence 5869, Ap
709	29	60.4	315	4	US-10-292-798-24	Sequence 24, Appl	782	29	60.4	602	4	US-10-369-493-5870	Sequence 5870, Ap
710	29	60.4	315	5	US-10-819-315-231	Sequence 231, Appl	783	29	60.4	614	4	US-10-214-599-26	Sequence 26, Appl
711	29	60.4	319	4	US-10-425-115-368976	Sequence 368976,	784	29	60.4	635	4	US-10-369-493-16746	Sequence 16746, A
712	29	60.4	320	3	US-09-811-284-141	Sequence 141, Appl	785	29	60.4	635	4	US-10-425-115-337707	Sequence 337707, A
713	29	60.4	327	4	US-10-369-493-5653	Sequence 5653, Ap	786	29	60.4	652	4	US-10-094-749-2199	Sequence 2199, Ap
714	29	60.4	327	4	US-10-425-115-238566	Sequence 238566,	787	29	60.4	653	3	US-09-801-574-82	Sequence 82, Appl
715	29	60.4	327	5	US-10-732-923-2686	Sequence 2686, Ap	788	29	60.4	653	4	US-10-408-765A-1729	Sequence 1729, Ap
716	29	60.4	327	5	US-10-732-923-14238	Sequence 14238, A	789	29	60.4	653	4	US-10-437-963-107453	Sequence 107453, A
717	29	60.4	328	4	US-10-437-963-193710	Sequence 193710,	790	29	60.4	666	4	US-10-767-701-44231	Sequence 44231, A
718	29	60.4	329	4	US-10-369-493-5941	Sequence 5941, Ap	791	29	60.4	666	4	US-10-156-761-8788	Sequence 8788, Ap
719	29	60.4	329	5	US-10-732-923-7852	Sequence 7852, Ap	792	29	60.4	675	4	US-10-425-115-20355	Sequence 20355, A
720	29	60.4	338	3	US-09-886-055-205	Sequence 205, Appl	793	29	60.4	679	3	US-09-815-242-5407	Sequence 5407, Ap
721	29	60.4	338	3	US-09-804-291-205	Sequence 205, Appl	794	29	60.4	701	4	US-10-424-599-238593	Sequence 238593, A
722	29	60.4	338	4	US-10-017-161-30	Sequence 30, Appl	795	29	60.4	707	4	US-10-332-447-21	Sequence 21, Appl
723	29	60.4	338	5	US-10-819-316-205	Sequence 205, Appl	796	29	60.4	708	4	US-10-072-012-154	Sequence 154, Appl
724	29	60.4	340	4	US-09-815-242-11626	Sequence 11626, A	797	29	60.4	711	4	US-10-437-963-204946	Sequence 204946, A
725	29	60.4	340	4	US-10-335-977-5179	Sequence 5179, Ap	798	29	60.4	715	4	US-10-425-115-556181	Sequence 556181, A
726	29	60.4	340	4	US-10-335-977-5180	Sequence 5180, Ap	799	29	60.4	717	3	US-09-918-779-12	Sequence 12, Appl
727	29	60.4	340	4	US-10-335-977-5181	Sequence 5181, Ap	800	29	60.4	717	4	US-10-624-932-12	Sequence 12, Appl
728	29	60.4	348	4	US-10-425-115-324102	Sequence 324102, A	801	29	60.4	720	4	US-10-282-122A-71337	Sequence 71337, A
729	29	60.4	348	4	US-10-282-122A-67842	Sequence 67842, A	802	29	60.4	729	4	US-10-282-122A-70659	Sequence 70659, A
730	29	60.4	354	4	US-10-369-493-13876	Sequence 13876, A	803	29	60.4	730	4	US-10-724-972A-6230	Sequence 6230, Ap
731	29	60.4	354	4	US-10-282-122A-69242	Sequence 69242, A	804	29	60.4	730	3	US-09-815-242-12489	Sequence 12489, A
732	29	60.4	354	4	US-10-335-977-5182	Sequence 5182, Ap	805	29	60.4	731	4	US-10-282-122A-44247	Sequence 44247, A
733	29	60.4	357	3	US-09-874-132-25	Sequence 25, Appl	806	29	60.4	732	4	US-10-282-122A-60338	Sequence 60338, A
734	29	60.4	357	5	US-10-663-401-25	Sequence 25, Appl	807	29	60.4	741	4	US-10-369-493-3983	Sequence 3983, Ap
735	29	60.4	359	5	US-10-732-923-7851	Sequence 7851, Ap	808	29	60.4	747	4	US-10-425-115-338560	Sequence 338560, A
736	29	60.4	376	4	US-10-389-566-729	Sequence 729, Appl	809	29	60.4	751	4	US-10-369-493-16722	Sequence 16722, A
737	29	60.4	382	4	US-10-425-115-324105	Sequence 324105,	810	29	60.4	751	4	US-10-114-893-314	Sequence 114, Appl
738	29	60.4	388	4	US-10-437-963-140237	Sequence 140237,	811	29	60.4	751	4	US-10-060-036-172	Sequence 172, Appl
739	29	60.4	390	4	US-10-425-115-286991	Sequence 286991,	812	29	60.4	751	4	US-10-205-823-359	Sequence 359, Appl
740	29	60.4	392	4	US-10-425-115-285129	Sequence 285129,	813	29	60.4	751	4	US-10-262-658-14	Sequence 14, Appl
741	29	60.4	392	4	US-10-425-115-279368	Sequence 279368,	814	29	60.4	751	4	US-10-369-493-9755	Sequence 9755, Ap
742	29	60.4	402	4	US-10-424-599-254788	Sequence 254788,	815	29	60.4	751	4	US-10-282-122A-45907	Sequence 45907, A
743	29	60.4	403	4	US-10-437-963-137500	Sequence 137500,	816	29	60.4	751	4	US-10-669-116-14	Sequence 116, Appl
744	29	60.4	406	4	US-10-142-835-33	Sequence 33, Appl	817	29	60.4	751	5	US-10-723-860-2265	Sequence 2265, Ap
745	29	60.4	406	6	US-11-061-925-33	Sequence 33, Appl	818	29	60.4	751	5	US-10-756-149-5315	Sequence 5315, Ap
746	29	60.4	406	6	US-11-062-007-33	Sequence 33, Appl	819	29	60.4	751	6	US-11-051-454-359	Sequence 359, Appl
747	29	60.4	407	4	US-10-142-835-22	Sequence 22, Appl	820	29	60.4	752	3	US-09-815-242-10788	Sequence 10788, A
748	29	60.4	407	4	US-10-424-599-231615	Sequence 231615,	821	29	60.4	752	4	US-10-282-122A-57068	Sequence 57068, A
749	29	60.4	407	6	US-11-061-925-22	Sequence 22, Appl	822	29	60.4	752	4	US-10-437-963-115259	Sequence 115259, A
750	29	60.4	411	4	US-10-036-959B-8	Sequence 8, Appl	823	29	60.4	753	4	US-10-282-122A-45988	Sequence 45988, A
751	29	60.4	411	4	US-10-425-114-50163	Sequence 50163, A	824	29	60.4	761	4	US-10-072-012-156	Sequence 156, Appl
752	29	60.4	416	4	US-10-425-114-64456	Sequence 64456, A	825	29	60.4	766	4	US-10-425-115-286319	Sequence 286319, A
753	29	60.4	419	5	US-10-872-198-39	Sequence 39, Appl	826	29	60.4	802	5	US-10-437-963-155996	Sequence 155996, A
754	29	60.4	419	5	US-10-872-197A-39	Sequence 39, Appl	827	29	60.4	814	4	US-10-732-923-32251	Sequence 32251, A
755	29	60.4	419	6	US-11-021-951-39	Sequence 39, Appl	828	29	60.4	821	3	US-10-437-963-137060	Sequence 137060, A
756	29	60.4	423	4	US-10-108-260A-3292	Sequence 3292, Ap	829	29	60.4	821	3	US-09-848-035-2	Sequence 2, Appl
757	29	60.4	423	4			830	29	60.4	821	3	US-09-986-224-2	Sequence 2, Appl

831	29	60.4	821	5	US-10-890-776A-4805	Sequence 4805, Ap	904	28	58.3	47	4	US-10-425-115-316476	Sequence 316476,
832	29	60.4	821	5	US-10-116-422-2	Sequence 2, Appl1	905	28	58.3	47	5	US-10-808-187-1558	Sequence 1558, Ap
833	29	60.4	847	5	US-10-778-804-8	Sequence 8, Appl1	906	28	58.3	47	5	US-10-979-183-175	Sequence 175, Ap
834	29	60.4	847	5	US-10-778-804-9	Sequence 9, Appl1	907	28	58.3	47	5	US-10-807-807-1558	Sequence 1558, Ap
835	29	60.4	852	4	US-10-374-780A-1911	Sequence 1911, Ap	908	28	58.3	52	4	US-10-425-115-283845	Sequence 283845,
836	29	60.4	852	4	US-10-389-566-685	Sequence 685, Ap	909	28	58.3	55	4	US-10-425-115-271184	Sequence 271184,
837	29	60.4	852	4	US-10-389-566-2226	Sequence 2326, Ap	910	28	58.3	56	4	US-10-767-701-56254	Sequence 56254, A
838	29	60.4	854	4	US-10-437-963-199542	Sequence 199542,	911	28	58.3	62	4	US-10-425-115-297737	Sequence 297737,
839	29	60.4	889	6	US-11-097-143-1383	Sequence 1383, Ap	912	28	58.3	63	4	US-10-424-599-202648	Sequence 202642,
840	29	60.4	905	4	US-10-425-115-198750	Sequence 198750,	913	28	58.3	65	4	US-10-437-963-135800	Sequence 135800,
841	29	60.4	912	4	US-10-389-566-363	Sequence 363, Ap	914	28	58.3	66	4	US-10-767-701-33429	Sequence 324939,
842	29	60.4	932	4	US-10-425-115-304638	Sequence 304638,	915	28	58.3	68	4	US-10-767-701-33429	Sequence 32429,
843	29	60.4	952	4	US-10-407-866-70	Sequence 70, Appl	916	28	58.3	69	4	US-10-424-599-280530	Sequence 280530,
844	29	60.4	952	5	US-10-450-763-34283	Sequence 34283, A	917	28	58.3	70	3	US-10-894-882-161	Sequence 161, Ap
845	29	60.4	980	3	US-09-848-035-13	Sequence 13, Appl	918	28	58.3	70	5	US-10-894-882-161	Sequence 161, Ap
846	29	60.4	980	3	US-09-848-035-13	Sequence 13, Appl	919	28	58.3	71	3	US-09-864-761-35582	Sequence 35582, A
847	29	60.4	980	3	US-09-848-035-13	Sequence 13, Appl	920	28	58.3	71	3	US-09-864-761-35582	Sequence 35582, A
848	29	60.4	980	3	US-09-848-035-13	Sequence 13, Appl	921	28	58.3	71	3	US-10-424-599-249575	Sequence 249575,
849	29	60.4	994	5	US-10-425-115-282418	Sequence 282418,	922	28	58.3	71	5	US-10-617-320-4429	Sequence 4429, Ap
850	29	60.4	1009	5	US-10-794-342-17	Sequence 17, Appl	923	28	58.3	72	4	US-10-424-599-182812	Sequence 192812,
851	29	60.4	1030	4	US-10-369-493-2181	Sequence 2181, Ap	924	28	58.3	74	3	US-09-878-603-8	Sequence 8, Appl1
852	29	60.4	1049	4	US-10-239-663-42	Sequence 42, Appl	925	28	58.3	75	4	US-10-437-963-123297	Sequence 132397,
853	29	60.4	1166	4	US-10-424-599-189678	Sequence 189678,	926	28	58.3	75	4	US-10-425-115-318369	Sequence 318369,
854	29	60.4	1179	4	US-10-437-963-159124	Sequence 159124,	927	28	58.3	75	4	US-10-425-115-318369	Sequence 318369,
855	29	60.4	1179	4	US-10-425-115-337709	Sequence 337709,	928	28	58.3	77	4	US-10-767-701-40997	Sequence 40997, A
856	29	60.4	1214	4	US-10-425-115-245074	Sequence 245074,	929	28	58.3	77	4	US-10-425-115-185568	Sequence 185568,
857	29	60.4	1229	6	US-11-097-143-17760	Sequence 17760, A	930	28	58.3	78	4	US-09-864-408A-590	Sequence 590, Ap
858	29	60.4	1272	4	US-10-425-115-63118	Sequence 63118, A	931	28	58.3	78	4	US-10-424-599-207535	Sequence 207535,
859	29	60.4	1355	4	US-10-425-115-337712	Sequence 337712,	932	28	58.3	79	4	US-10-425-115-234566	Sequence 234566,
860	29	60.4	1358	4	US-10-425-115-241075	Sequence 241075,	933	28	58.3	80	4	US-10-425-115-297830	Sequence 297830,
861	29	60.4	1368	4	US-10-425-115-324108	Sequence 324108,	934	28	58.3	83	4	US-10-424-599-167745	Sequence 167745,
862	29	60.4	1444	4	US-10-450-763-60035	Sequence 60035, A	935	28	58.3	84	4	US-10-351-334-157	Sequence 157, Ap
863	29	60.4	1470	4	US-10-425-115-324095	Sequence 324095,	936	28	58.3	84	4	US-10-425-115-315653	Sequence 315653,
864	29	60.4	1517	4	US-10-425-115-324099	Sequence 324099,	937	28	58.3	86	4	US-10-002-631C-100	Sequence 100, Ap
865	29	60.4	1529	4	US-10-369-493-1692	Sequence 1692, Ap	938	28	58.3	86	4	US-10-425-115-195253	Sequence 195253,
866	29	60.4	1605	4	US-10-425-115-362998	Sequence 362998,	939	28	58.3	87	4	US-10-425-115-208454	Sequence 208454,
867	29	60.4	1661	4	US-10-425-115-337705	Sequence 337705,	940	28	58.3	87	3	US-09-764-891-3179	Sequence 3179, Ap
868	29	60.4	1676	4	US-10-425-115-238569	Sequence 238569,	941	28	58.3	88	4	US-10-425-115-268724	Sequence 268724,
869	29	60.4	1708	4	US-10-425-115-324103	Sequence 324103,	942	28	58.3	88	4	US-10-425-115-278628	Sequence 278628,
870	29	60.4	1713	4	US-10-425-115-324109	Sequence 324109,	943	28	58.3	89	4	US-10-424-599-2170538	Sequence 2170538,
871	29	60.4	1715	4	US-10-425-115-324123	Sequence 324123,	944	28	58.3	89	5	US-10-739-930-8870	Sequence 8870, Ap
872	29	60.4	1727	4	US-10-425-115-248224	Sequence 248224,	945	28	58.3	90	4	US-10-437-963-160993	Sequence 160993,
873	29	60.4	1752	4	US-10-425-115-238562	Sequence 238562,	946	28	58.3	92	4	US-10-351-334-319	Sequence 319, Ap
874	29	60.4	1766	4	US-10-425-115-324098	Sequence 324098,	947	28	58.3	92	4	US-10-437-963-154406	Sequence 154406,
875	29	60.4	2135	4	US-10-437-963-122794	Sequence 122794,	948	28	58.3	93	5	US-10-808-187-1077	Sequence 1077, Ap
876	29	60.4	2749	4	US-10-360-101-265	Sequence 265, Ap	949	28	58.3	93	5	US-10-807-807-1077	Sequence 1077, Ap
877	29	60.4	3104	4	US-10-425-115-365697	Sequence 365697,	950	28	58.3	94	3	US-09-925-297-690	Sequence 690, Ap
878	29	60.4	3210	4	US-10-425-115-365699	Sequence 365699,	951	28	58.3	94	3	US-09-764-891-4373	Sequence 4373, Ap
879	29	60.4	3229	4	US-10-425-115-324093	Sequence 324093,	952	28	58.3	94	3	US-10-156-761-14998	Sequence 14998, A
880	29	60.4	3749	4	US-10-425-115-324125	Sequence 324125,	953	28	58.3	94	6	US-11-097-143-18279	Sequence 18279, A
881	29	60.4	3843	6	US-11-097-143-41379	Sequence 41379, A	954	28	58.3	95	4	US-10-425-115-312245	Sequence 312245,
882	28.5	59.4	212	4	US-10-437-963-175248	Sequence 175248,	955	28	58.3	97	3	US-09-864-408A-1742	Sequence 1742, Ap
883	28.5	59.4	598	5	US-10-450-763-52598	Sequence 52598, A	956	28	58.3	97	4	US-10-424-599-159467	Sequence 159467,
884	28.5	59.4	700	4	US-10-437-963-133958	Sequence 133958,	957	28	58.3	100	4	US-10-424-599-284403	Sequence 284403,
885	28	58.3	8	4	US-10-712-425-813	Sequence 813, Ap	958	28	58.3	103	4	US-10-437-963-128484	Sequence 128484,
886	28	58.3	8	5	US-10-773-032-813	Sequence 813, Ap	959	28	58.3	106	4	US-10-425-115-203167	Sequence 203167,
887	28	58.3	10	5	US-10-936-237-177	Sequence 177, Ap	960	28	58.3	106	4	US-10-437-963-109459	Sequence 109459,
888	28	58.3	28	4	US-10-080-254-100	Sequence 100, Ap	961	28	58.3	110	4	US-10-424-599-223078	Sequence 223078,
889	28	58.3	28	4	US-10-242-155-646	Sequence 646, Ap	962	28	58.3	110	4	US-10-425-115-322402	Sequence 322402,
890	28	58.3	33	3	US-09-884-882-162	Sequence 162, Ap	963	28	58.3	111	5	US-10-450-763-41087	Sequence 41087, A
891	28	58.3	33	3	US-09-884-882-367	Sequence 367, Ap	964	28	58.3	111	5	US-10-450-763-56326	Sequence 56326, A
892	28	58.3	33	3	US-10-894-914A-162	Sequence 162, Ap	965	28	58.3	112	4	US-10-424-599-205076	Sequence 205076,
893	28	58.3	33	5	US-10-894-914A-367	Sequence 367, Ap	966	28	58.3	113	4	US-10-767-701-38780	Sequence 38780, A
894	28	58.3	34	4	US-10-894-914A-367	Sequence 367, Ap	967	28	58.3	113	5	US-10-450-763-38049	Sequence 38049, A
895	28	58.3	34	4	US-10-425-115-264241	Sequence 264241,	968	28	58.3	114	4	US-10-142-835-2	Sequence 2, Appl1
896	28	58.3	39	4	US-10-424-599-274765	Sequence 274765,	969	28	58.3	114	4	US-10-425-115-55969	Sequence 55969, A
897	28	58.3	39	4	US-10-424-599-229157	Sequence 229157,	970	28	58.3	114	6	US-11-061-925-2	Sequence 2, Appl1
898	28	58.3	42	4	US-10-424-599-229157	Sequence 229157,	971	28	58.3	114	6	US-11-061-925-2	Sequence 2, Appl1
899	28	58.3	44	4	US-10-425-115-270789	Sequence 270789,	972	28	58.3	115	4	US-10-425-115-274073	Sequence 274073,
900	28	58.3	46	4	US-10-424-599-192824	Sequence 192824,	973	28	58.3	115	4	US-10-425-115-274162	Sequence 274162,
901	28	58.3	47	4	US-10-425-115-270789	Sequence 175, Ap	974	28	58.3	115	4	US-10-425-115-284691	Sequence 284691,
902	28	58.3	47	4	US-10-424-599-253688	Sequence 253688,	975	28	58.3	116	4	US-10-437-963-123741	Sequence 123741,
903	28	58.3	47	4	US-10-799-747-175	Sequence 175, Ap	976	28	58.3	121	5	US-10-501-282-3632	Sequence 3622, Ap

977 28 58.3 122 4 US-10-108-260A-3868 Sequence 3868, Ap
978 28 58.3 126 4 US-10-424-599-149119 Sequence 149119,
979 28 58.3 128 4 US-10-424-599-240240 Sequence 240240,
980 28 58.3 128 4 US-10-425-115-190185 Sequence 190185,
981 28 58.3 131 4 US-10-424-599-158573 Sequence 158573,
982 28 58.3 131 4 US-10-424-599-213801 Sequence 213801,
983 28 58.3 132 4 US-10-424-599-205949 Sequence 205949,
984 28 58.3 132 4 US-10-425-115-253072 Sequence 253072,
985 28 58.3 137 4 US-10-424-599-226009 Sequence 226009,
986 28 58.3 137 4 US-10-437-963-201026 Sequence 201026,
987 28 58.3 139 4 US-10-425-115-275465 Sequence 275465,
988 28 58.3 140 4 US-10-425-115-279773 Sequence 279773,
989 28 58.3 145 4 US-10-425-115-223484 Sequence 223484,
990 28 58.3 147 4 US-10-424-599-240475 Sequence 240475,
991 28 58.3 149 4 US-10-424-599-214770 Sequence 214770,
992 28 58.3 153 4 US-10-335-977-8729 Sequence 8729, Ap
993 28 58.3 155 4 US-09-801-944B-255 Sequence 255, App
994 28 58.3 156 4 US-10-335-977-8730 Sequence 8730, Ap
995 28 58.3 161 3 US-09-925-301-909 Sequence 909, App
996 28 58.3 162 6 US-11-021-949-31 Sequence 31, Appl
997 28 58.3 164 4 US-10-767-701-60222 Sequence 60222, A
998 28 58.3 167 4 US-10-437-963-133454 Sequence 133454,
999 28 58.3 169 4 US-10-437-963-123864 Sequence 123864,
1000 28 58.3 169 4 US-10-425-115-306614 Sequence 306614,

ALIGNMENTS

RESULT 1
US-09-909-460-103
; Sequence 103, Application US/09909460
; Publication No. US20020182258A1
; GENERAL INFORMATION:
; APPLICANT: Luneford, Lynn B.
; APPLICANT: Putnam, David
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
; FILE REFERENCE: 08191/014001
; CURRENT APPLICATION NUMBER: US/09/909,460
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 103
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-909-460-103
Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDLCTV 9
Db 1 FAFRDLCTV 9

RESULT 2
US-09-872-836-103
; Sequence 103, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
; APPLICANT: Barmen, Shikha P.
; APPLICANT: McKeever, Una
; APPLICANT: Hedley, Mary Lynne
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; CURRENT FILING DATE: 2001-06-01

; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-103
Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDLCTV 9
Db 1 FAFRDLCTV 9

RESULT 3
US-10-128-711-67
; Sequence 67, Application US/10128711
; Publication No. US20030099634A1
; GENERAL INFORMATION:
; APPLICANT: VITIELLO, Maria A.
; CHESTNUT, Robert W.
; SETTE, Alessandro D.
; CELIS, Esbenan
; GRAY, Howard
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; CTL IMMUNITY
; NUMBER OF SEQUENCES: 153
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Kourie and Crew
; STREET: Stewart Street Tower, One Market Plaza
; CITY: San Francisco
; STATE: California
; COUNTRY: US
; ZIP: 94105-1493
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/128,711
; FILING DATE: 22-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/197,484
; FILING DATE: 16-FEB-1994
; APPLICATION NUMBER: US 07/935,811
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: US 07/874,491
; FILING DATE: 27-APR-1992
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; APPLICATION NUMBER: US 07/749,568
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 14137-26-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 467-9600
; TELEFAX: (206) 623-6793
; INFORMATION FOR SEQ ID NO: 67:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 67;
US-10-128-711-67

Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 1 FAFRDLCIV 9

RESULT 4
US-10-133-210-281

; Sequence 281, Application US/10133210
; Publication No. US20030103964A1
; GENERAL INFORMATION:
; APPLICANT: Delisi, Charles
; APPLICANT: Berzofsky, Jay
; APPLICANT: Gulakota, Kamalakar
; APPLICANT: Vaccaro, Dennis
; APPLICANT: Weng, Ziping
; APPLICANT: Zhang, Chao
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND
; FILE REFERENCE: BU-035AX
; CURRENT APPLICATION NUMBER: US/10/133,210
; CURRENT FILING DATE: 2002-04-26
; NUMBER OF SEQ ID NOS: 281
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 281
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-133-210-281

Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 1 FAFRDLCIV 9

RESULT 5
US-10-758-970-103

; Sequence 103, Application US/10758970
; Publication No. US20050037086A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Hsu, Yung-Yueh
; APPLICANT: Tyo, Michael
; TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
; FILE REFERENCE: 08191-012001
; CURRENT APPLICATION NUMBER: US/10/758,970
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: US/09/715,708A
; PRIOR FILING DATE: 2000-11-17
; PRIOR APPLICATION NUMBER: US 60/166,516
; PRIOR FILING DATE: 1999-11-19
; NUMBER OF SEQ ID NOS: 109
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 103
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-758-970-103

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 1 FAFRDLCIV 9

RESULT 6
US-10-751-845-57

; Sequence 57, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NOCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 57
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-57

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 1 FAFRDLCIV 9

RESULT 7
US-10-476-570-29

; Sequence 29, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 29
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E6 50-64
US-10-476-570-29

Query Match 100.0%; Score 48; DB 4; Length 15;

Best Local Similarity 100.0%; Pred. No. 0.052; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 FAFRDLCTV 9
|||
Db 3 FAFRDLCTV 11

RESULT 8
US-10-858-384-6
; Sequence 6, Application US/10858384
; Publication No. US20050033255A1
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; PRIOR FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 6
; LENGTH: 22
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of the Artificial Sequence: Peptide fragment
US-10-858-384-6

Query Match 100.0%; Score 48; DB 5; Length 22;
Best Local Similarity 100.0%; Pred. No. 0.075;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||
Db 7 FAFRDLCTV 15

RESULT 9
US-10-751-845-65
; Sequence 65, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; PRIOR FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 65
; LENGTH: 24
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-65

Query Match 100.0%; Score 48; DB 5; Length 24;

Best Local Similarity 100.0%; Pred. No. 0.082; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 FAFRDLCTV 9
|||
Db 9 FAFRDLCTV 17

RESULT 10
US-10-751-845-126
; Sequence 126, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; PRIOR FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 126
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-126

Query Match 100.0%; Score 48; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 0.39; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||
Db 29 FAFRDLCTV 37

RESULT 11
US-10-177-390-6
; Sequence 6, Application US/10177390
; Publication No. US20030143743A1
; GENERAL INFORMATION:
; APPLICANT: Schuler, Gerold
; APPLICANT: N.V. Antwerp Innovatiecentrum
; TITLE OF INVENTION: Improved transfection of Eucaryotic Cells with linear
; FILE REFERENCE: 021505wo/JH/ml
; CURRENT APPLICATION NUMBER: US/10/177,390
; PRIOR FILING DATE: 2002-06-20
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-177-390-6

Query Match 100.0%; Score 48; DB 4; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.51; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||
Db 45 FAFRDLCTV 53

```
RESULT 12
US-10-484-063-20
; Sequence 20, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILTERMO
; APPLICANT: FOLLEN, MICHELE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 20
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-20

Query Match          100.0%; Score 48; DB 5; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.51;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 45 FAFRDLCIV 53

RESULT 13
US-10-484-063-27
; Sequence 27, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILTERMO
; APPLICANT: FOLLEN, MICHELE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-484-063-27

Query Match          100.0%; Score 48; DB 5; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.51;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 45 FAFRDLCIV 53

RESULT 14
US-10-858-384-2
; Sequence 2, Application US/10858384
; Publication No. US2005003025A1
```

```
; GENERAL INFORMATION:
; APPLICANT: CHOPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCES
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; PRIOR FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 2
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-858-384-2

Query Match          100.0%; Score 48; DB 5; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.53;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 52 FAFRDLCIV 60

RESULT 15
US-10-367-057-16
; Sequence 16, Application US/10367057
; Publication No. US20050100554A1
; GENERAL INFORMATION:
; APPLICANT: Cuthill, Scott;
; APPLICANT: Jackson, Amanda;
; APPLICANT: Lewin, David A.;
; APPLICANT: Ooi, Chean Eng
; TITLE OF INVENTION: Complexes and Methods of Using Same
; FILE REFERENCE: 21402-559
; CURRENT APPLICATION NUMBER: US/10/367,057
; PRIOR FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 60/256,911
; PRIOR FILING DATE: 2002-02-14
; NUMBER OF SEQ ID NOS: 198
; SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 16
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-367-057-16

Query Match          100.0%; Score 48; DB 5; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.53;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
DB 52 FAFRDLCIV 60

RESULT 16
US-11-021-949-13
; Sequence 13, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
```

;; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
;; FILE REFERENCE: VITA-012
;; CURRENT APPLICATION NUMBER: US/11/021,949
;; CURRENT FILING DATE: 2004-12-23
;; PRIOR APPLICATION NUMBER: 60/532,373
;; PRIOR FILING DATE: 2003-12-23
;; NUMBER OF SEQ ID NOS: 361
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 13
;; LENGTH: 158
;; TYPE: PRT
;; ORGANISM: human papilloma virus (HPV)
US-11-021-949-13

Query Match 100.0%; Score 48; DB 6; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.53;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PAFRDLCTV 9
|||
Db 52 PAFRDLCTV 60

RESULT 17
US-10-472-724-2
;; Sequence 2, Application US/10472724
;; Publication No. US20040171806A1
;; GENERAL INFORMATION:
;; APPLICANT: Cld-Arregui, Angel
;; APPLICANT: Zur Hausen, Harald
;; TITLE OF INVENTION: Modified HPV E6 and E7 genes and proteins useful for vaccination
;; FILE REFERENCE: 4121-154
;; CURRENT APPLICATION NUMBER: US/10/472,724
;; CURRENT FILING DATE: 2003-09-17
;; PRIOR APPLICATION NUMBER: PCF/EP02/03271
;; PRIOR FILING DATE: 2003-03-22
;; PRIOR APPLICATION NUMBER: EP 01107271.7
;; PRIOR FILING DATE: 2001-03-23
;; NUMBER OF SEQ ID NOS: 27
;; SOFTWARE: PatentIn version 3.2
;; SEQ ID NO 2
;; LENGTH: 171
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Synthetic Construct
US-10-472-724-2

Query Match 100.0%; Score 48; DB 4; Length 171;
Best Local Similarity 100.0%; Pred. No. 0.57;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PAFRDLCTV 9
|||
Db 57 PAFRDLCTV 65

RESULT 18
US-10-751-845-157
;; Sequence 157, Application US/10751845
;; Publication No. US20050100928A1
;; GENERAL INFORMATION:
;; APPLICANT: Hedley, Mary Lynne
;; APPLICANT: Urban, Robert G.
;; APPLICANT: Chicz, Roman M.
;; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
;; FILE REFERENCE: 08191-013001
;; CURRENT APPLICATION NUMBER: US/10/751,845
;; CURRENT FILING DATE: 2004-01-05
;; PRIOR APPLICATION NUMBER: US/09/664,225
;; PRIOR FILING DATE: 2000-08-18
;; PRIOR APPLICATION NUMBER: US 60/169,846

;; PRIOR FILING DATE: 1999-12-09
;; PRIOR APPLICATION NUMBER: US 60/154,665
;; PRIOR FILING DATE: 1999-09-16
;; NUMBER OF SEQ ID NOS: 163
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 157
;; LENGTH: 236
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-157

Query Match 100.0%; Score 48; DB 5; Length 236;
Best Local Similarity 100.0%; Pred. No. 0.79;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PAFRDLCTV 9
|||
Db 29 PAFRDLCTV 37

RESULT 19
US-10-751-845-158
;; Sequence 158, Application US/10751845
;; Publication No. US20050100928A1
;; GENERAL INFORMATION:
;; APPLICANT: Hedley, Mary Lynne
;; APPLICANT: Urban, Robert G.
;; APPLICANT: Chicz, Roman M.
;; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
;; FILE REFERENCE: 08191-013001
;; CURRENT APPLICATION NUMBER: US/10/751,845
;; CURRENT FILING DATE: 2004-01-05
;; PRIOR APPLICATION NUMBER: US/09/664,225
;; PRIOR FILING DATE: 2000-08-18
;; PRIOR APPLICATION NUMBER: US 60/169,846
;; PRIOR FILING DATE: 1999-12-09
;; PRIOR APPLICATION NUMBER: US 60/154,665
;; PRIOR FILING DATE: 1999-09-16
;; NUMBER OF SEQ ID NOS: 163
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 158
;; LENGTH: 237
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-158

Query Match 100.0%; Score 48; DB 5; Length 237;
Best Local Similarity 100.0%; Pred. No. 0.79;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PAFRDLCTV 9
|||
Db 30 PAFRDLCTV 38

RESULT 20
US-11-072-288-1
;; Sequence 1, Application US/11072288
;; Publication No. US20050159386A1
;; GENERAL INFORMATION:
;; APPLICANT: KIENY, Marie-Paule
;; APPLICANT: BALLOU, Jean-Marc
;; APPLICANT: BIZOUARNE, Nadine
;; TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
;; FILE REFERENCE: 01753-122
;; CURRENT APPLICATION NUMBER: US/11/072,288
;; CURRENT FILING DATE: 2005-03-07
;; PRIOR APPLICATION NUMBER: US/09/462,993

;; PRIOR FILING DATE: 2000-04-17
;; PRIOR APPLICATION NUMBER: PCT/FR98/01576
;; PRIOR FILING DATE: 1998-07-17
;; PRIOR APPLICATION NUMBER: FR 97/09152
;; PRIOR FILING DATE: 1997-07-18
;; NUMBER OF SEQ ID NOS: 23
;; SOFTWARE: PatentIn Ver. 2.2
;; SEQ ID NO 1
;; LENGTH: 243
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence:Derived from
;; OTHER INFORMATION: human papillomavirus, strain HPV-16, E6 protein
;; OTHER INFORMATION: fused F protein signals, clone E6*TMF.
US-11-072-288-1

Query Match 100.0%; Score 48; DB 6; Length 243;
Best Local Similarity 100.0%; Pred. No. 0.81;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 80 FAFRDLCTV 88

RESULT 21
US-10-751-845-160
;; Sequence 160, Application US/10751845
;; Publication No. US20050100928A1
;; GENERAL INFORMATION:
;; APPLICANT: Hedley, Mary Lynne
;; APPLICANT: Urban, Robert G.
;; APPLICANT: Chic, Roman M.
;; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
;; FILE REFERENCE: 08191-013001
;; CURRENT APPLICATION NUMBER: US/10/751,845
;; PRIOR FILING DATE: 2004-01-05
;; PRIOR APPLICATION NUMBER: US/09/664,225
;; PRIOR FILING DATE: 2000-08-18
;; PRIOR APPLICATION NUMBER: US 60/169,846
;; PRIOR FILING DATE: 1999-12-09
;; PRIOR APPLICATION NUMBER: US 60/154,665
;; PRIOR FILING DATE: 1999-09-16
;; NUMBER OF SEQ ID NOS: 163
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 160
;; LENGTH: 261
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-160

Query Match 100.0%; Score 48; DB 5; Length 261;
Best Local Similarity 100.0%; Pred. No. 0.87;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 54 FAFRDLCTV 62

RESULT 22
US-09-367-309A-1
;; Sequence 1, Application US/09367309A
;; Publication No. US20020081329A1
;; GENERAL INFORMATION:
;; APPLICANT: MACFARLAN, RODERICK I.
;; APPLICANT: WALLIAROS, JIM
;; TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
;; FILE REFERENCE: 017227/0149
;; CURRENT APPLICATION NUMBER: US/09/367,309A

;; CURRENT FILING DATE: 1999-08-11
;; PRIOR APPLICATION NUMBER: PCT/AU98/00080
;; PRIOR FILING DATE: 1998-02-13
;; PRIOR APPLICATION NUMBER: AU PO 5178
;; PRIOR FILING DATE: 1997-02-19
;; NUMBER OF SEQ ID NOS: 6
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 1
;; LENGTH: 266
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

Query Match 100.0%; Score 48; DB 3; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.89;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 52 FAFRDLCTV 60

RESULT 23
US-10-000-903-4
;; Sequence 4, Application US/10000903
;; Publication No. US20020182221A1
;; GENERAL INFORMATION:
;; APPLICANT: Bruck, Claudine
;; APPLICANT: Cabezon Silva, Teresa
;; APPLICANT: Delisse, Anne-Marie Eva Fernande
;; APPLICANT: Gerard, Catherine Marie Ghislaine
;; APPLICANT: Lombardo-Bencheikh, Angela
;; TITLE OF INVENTION: Vaccine
;; FILE REFERENCE: B45107
;; CURRENT APPLICATION NUMBER: US/10/000,903
;; PRIOR FILING DATE: 2001-10-01
;; PRIOR APPLICATION NUMBER: PCT/EP98/05285
;; PRIOR FILING DATE: 1998-08-17
;; PRIOR APPLICATION NUMBER: GB 9717953.5
;; PRIOR FILING DATE: 1997-08-22
;; NUMBER OF SEQ ID NOS: 23
;; SOFTWARE: FastSeq for Windows Version 3.0
;; SEQ ID NO 4
;; LENGTH: 273
;; TYPE: PRT
;; ORGANISM: Homo sapien
US-10-000-903-4

Query Match 100.0%; Score 48; DB 4; Length 273;
Best Local Similarity 100.0%; Pred. No. 0.91;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 158 FAFRDLCTV 166

RESULT 24
US-10-899-771-4
;; Sequence 4, Application US/10899771
;; Publication No. US20050031638A1
;; GENERAL INFORMATION:
;; APPLICANT: Dalemans, Wilfried L.V.
;; APPLICANT: Gerard, Catherine Marie Ghislaine
;; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
;; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
;; FILE REFERENCE: B45124
;; CURRENT APPLICATION NUMBER: US/10/899,771
;; PRIOR FILING DATE: 2004-07-27
;; PRIOR APPLICATION NUMBER: US/09/581,976
;; PRIOR FILING DATE: 2000-06-20
;; PRIOR APPLICATION NUMBER: PCT/EP98/08563
;; PRIOR FILING DATE: 1998-12-18

;; PRIOR APPLICATION NUMBER: GB 9727262.9
;; PRIOR FILING DATE: 1997-12-24
;; NUMBER OF SEQ ID NOS: 28
;; SOFTWARE: FastSeq for Windows Version 3.0
;; SEQ ID NO 4
;; LENGTH: 273
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Chimeric protein (protein D from Haemophilus
;; OTHER INFORMATION: influenzae B and E6 from Human papilloma virus type
;; OTHER INFORMATION: 16)
US-10-899-771-4

Query Match 100.0%; Score 48; DB 5; Length 273;
Best Local Similarity 100.0%; Pred. No. 0.91;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDLCIV 9
Db 158 FAFRDLCIV 166

RESULT 25
US-10-000-903-10
;; Sequence 10, Application US/10000903
;; Publication No. US20020182221A1
;; GENERAL INFORMATION:
;; APPLICANT: Bruck, Claudine
;; APPLICANT: Cabezon Silva, Teresa
;; APPLICANT: Delisse, Anne-Marie Eva Fernande
;; APPLICANT: Gerard, Catherine Marie Ghislaine
;; APPLICANT: Lombardo-Bencheikh, Angela
;; TITLE OF INVENTION: Vaccine
;; FILE REFERENCE: B45107
;; CURRENT APPLICATION NUMBER: US/10/000,903
;; CURRENT FILING DATE: 2001-10-01
;; PRIOR APPLICATION NUMBER: PCT/EP98/05285
;; PRIOR FILING DATE: 1998-08-17
;; PRIOR APPLICATION NUMBER: GB 9717953.5
;; PRIOR FILING DATE: 1997-08-22
;; NUMBER OF SEQ ID NOS: 23
;; SOFTWARE: FastSeq for Windows Version 3.0
;; SEQ ID NO 10
;; LENGTH: 292
;; TYPE: PRT
;; ORGANISM: Homo sapien
US-10-000-903-10

Query Match 100.0%; Score 48; DB 4; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.97;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDLCIV 9
Db 177 FAFRDLCIV 185

RESULT 26
US-10-899-771-10
;; Sequence 10, Application US/10899771
;; Publication No. US20050031638A1
;; GENERAL INFORMATION:
;; APPLICANT: Dalemans, Wilfried L.J.
;; APPLICANT: Gerard, Catherine Marie Ghislaine
;; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
;; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
;; FILE REFERENCE: B45124
;; CURRENT APPLICATION NUMBER: US/10/899,771
;; CURRENT FILING DATE: 2004-07-27
;; PRIOR APPLICATION NUMBER: US/09/581,976
;; PRIOR FILING DATE: 2000-06-20
;; PRIOR APPLICATION NUMBER: PCT/EP98/08563

;; PRIOR FILING DATE: 1998-12-18
;; PRIOR APPLICATION NUMBER: GB 9727262.9
;; PRIOR FILING DATE: 1997-12-24
;; NUMBER OF SEQ ID NOS: 28
;; SOFTWARE: FastSeq for Windows Version 3.0
;; SEQ ID NO 10
;; LENGTH: 292
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Chimeric protein (Clyta from Streptococcus
;; OTHER INFORMATION: pneumoniae and E6 from Human papilloma virus type
;; OTHER INFORMATION: 16)
US-10-899-771-10

Query Match 100.0%; Score 48; DB 5; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.97;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDLCIV 9
Db 177 FAFRDLCIV 185

RESULT 27
US-10-000-903-6
;; Sequence 6, Application US/10000903
;; Publication No. US20020182221A1
;; GENERAL INFORMATION:
;; APPLICANT: Bruck, Claudine
;; APPLICANT: Cabezon Silva, Teresa
;; APPLICANT: Delisse, Anne-Marie Eva Fernande
;; APPLICANT: Gerard, Catherine Marie Ghislaine
;; APPLICANT: Lombardo-Bencheikh, Angela
;; TITLE OF INVENTION: Vaccine
;; FILE REFERENCE: B45107
;; CURRENT APPLICATION NUMBER: US/10/000,903
;; CURRENT FILING DATE: 2001-10-01
;; PRIOR APPLICATION NUMBER: PCT/EP98/05285
;; PRIOR FILING DATE: 1998-08-17
;; PRIOR APPLICATION NUMBER: GB 9717953.5
;; PRIOR FILING DATE: 1997-08-22
;; NUMBER OF SEQ ID NOS: 23
;; SOFTWARE: FastSeq for Windows Version 3.0
;; SEQ ID NO 6
;; LENGTH: 371
;; TYPE: PRT
;; ORGANISM: Homo sapien
US-10-000-903-6

Query Match 100.0%; Score 48; DB 4; Length 371;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDLCIV 9
Db 158 FAFRDLCIV 166

RESULT 28
US-10-899-771-6
;; Sequence 6, Application US/10899771
;; Publication No. US20050031638A1
;; GENERAL INFORMATION:
;; APPLICANT: Dalemans, Wilfried L.J.
;; APPLICANT: Gerard, Catherine Marie Ghislaine
;; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
;; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
;; FILE REFERENCE: B45124
;; CURRENT APPLICATION NUMBER: US/10/899,771
;; CURRENT FILING DATE: 2004-07-27
;; PRIOR APPLICATION NUMBER: US/09/581,976
;; PRIOR FILING DATE: 2000-06-20

PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 6
LENGTH: 371
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Chimaeic protein (protein D from Haemophilus
OTHER INFORMATION: influenza B and E6E7 fusion from Human papilloma
OTHER INFORMATION: virus type 16)
US-10-899-771-6

Query Match 100.0%; Score 48; DB 5; Length 371;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDCTIV 9
Db 158 FAFRDCTIV 166

RESULT 29
US-10-000-903-14
Sequence 14, Application US/10000903
Publication No. US2002018221A1
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Bernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Benchetikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 14
LENGTH: 390
TYPE: PRT
ORGANISM: Homo sapien
US-10-000-903-14

Query Match 100.0%; Score 48; DB 4; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.3;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDCTIV 9
Db 177 FAFRDCTIV 185

RESULT 30
US-10-899-771-14
Sequence 14, Application US/10899771
Publication No. US20050031638A1
GENERAL INFORMATION:
APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
FILE REFERENCE: B45124
CURRENT APPLICATION NUMBER: US/10/899,771
CURRENT FILING DATE: 2004-07-27
PRIOR APPLICATION NUMBER: US/09/581,976

PRIOR FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 14
LENGTH: 390
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Chimaeic protein (Clyta from Streptococcus
OTHER INFORMATION: pneumoniae and E6E7 fusion from Human papilloma
OTHER INFORMATION: virus type 16)
US-10-899-771-14

Query Match 100.0%; Score 48; DB 5; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.3;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDCTIV 9
Db 177 FAFRDCTIV 185

RESULT 31
US-10-367-095-10
Sequence 10, Application US/10367095
Publication No. US20030228696A1
GENERAL INFORMATION:
APPLICANT: Robin A. Robinson
TITLE OF INVENTION: No. US20030228696A1 Insect Cell Line
FILE REFERENCE: 44149-1US1
CURRENT APPLICATION NUMBER: US/10/367,095
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: US 60/356,119
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,118
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,133
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,157
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,156
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,123
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,113
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,154
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,135
PRIOR FILING DATE: 2002-02-14
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 10
LENGTH: 536
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: HPV-16 L2/E6 fusion protein
US-10-367-095-10

Query Match 100.0%; Score 48; DB 4; Length 536;
Best Local Similarity 100.0%; Pred. No. 1.8;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FAFRDCTIV 9
Db 177 FAFRDCTIV 185

Db 522 FAFRDLCTIV 530

RESULT 32

US-10-367-046-10

Sequence 10, Application US/10368046

Publication No. US20040063188A1

GENERAL INFORMATION:

APPLICANT: Robin A. Robinson

APPLICANT: Vitoria Cloce

TITLE OF INVENTION: Method for Isolation and Purification of

FILE REFERENCE: 44149-3051 Expressed Gene Products In Vitro

CURRENT APPLICATION NUMBER: US/10/368,046

CURRENT FILING DATE: 2003-02-15

PRIOR APPLICATION NUMBER: US 60/356,119

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,161

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,118

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,133

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,157

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,156

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,123

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,113

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,154

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,135

PRIOR FILING DATE: 2002-02-14

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 13

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 10

LENGTH: 536

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: HPV-16 L2/E6 fusion protein

US-10-368-046-10

Query Match 100.0%; Score 48; DB 4; Length 536;

Best Local Similarity 100.0%; Pred. No. 1.8;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9

Db 522 FAFRDLCTIV 530

RESULT 33

US-10-367-367-10

Sequence 10, Application US/10367367

Publication No. US20040121465A1

GENERAL INFORMATION:

APPLICANT: Robin A. Robinson

TITLE OF INVENTION: Optimization of Gene Sequences of

FILE REFERENCE: 44149-2051 Virus-Like Particles for Expression in Insect Cells

CURRENT APPLICATION NUMBER: US/10/367,367

CURRENT FILING DATE: 2003-02-15

PRIOR APPLICATION NUMBER: US 60/356,119

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,161

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,118

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,133

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,157

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,156

PRIOR FILING DATE: 2002-02-14

NUMBER OF SEQ ID NOS: 13

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 10

LENGTH: 536

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: HPV-16 L2/E6 fusion protein

US-10-367-367-10

Query Match 100.0%; Score 48; DB 4; Length 536;

Best Local Similarity 100.0%; Pred. No. 1.8;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9

Db 522 FAFRDLCTIV 530

RESULT 34

US-10-918-337-10

Sequence 10, Application US/10918337

Publication No. US2005018191A1

GENERAL INFORMATION:

APPLICANT: NOVAVAX, INC., et al.

TITLE OF INVENTION: Optimization of Gene Sequences of

FILE REFERENCE: 19065/2132 Chimeric Virus-Like Particles for Expression in Insect Cells

CURRENT APPLICATION NUMBER: US/10/918,337

CURRENT FILING DATE: 2004-08-13

PRIOR APPLICATION NUMBER: PCT/US03/04473

PRIOR FILING DATE: 2003-02-14

PRIOR APPLICATION NUMBER: US 60/356,119

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,161

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,118

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,133

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,157

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,156

PRIOR FILING DATE: 2002-02-14

PRIOR APPLICATION NUMBER: US 60/356,154

PRIOR FILING DATE: 2002-02-14

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 13

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 10

LENGTH: 536

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: HPV-16 L2/E6 fusion protein

US-10-918-337-10

Query Match 100.0%; Score 48; DB 5; Length 536;

Best Local Similarity 100.0%; Pred. No. 1.8;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9

Db 522 FAFRDLCTIV 530

RESULT 35

US-11-021-949-29
 ; Sequence 29, Application US/11021949
 ; Publication No. US20050142541A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LU, PETER
 ; APPLICANT: GARMAN, JONATHAN DAVID
 ; APPLICANT: BELMARES, MICHAEL P.
 ; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
 ; APPLICANT: SCHWEIZER, JOHANNES
 ; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
 ; FILE REFERENCE: VITA-012
 ; CURRENT APPLICATION NUMBER: US/11/021,949
 ; PRIOR FILING DATE: 2004-12-23
 ; PRIOR FILING DATE: 2003-12-23
 ; NUMBER OF SEQ ID NOS: 361
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 29
 ; LENGTH: 158
 ; TYPE: PRT
 ; ORGANISM: human papilloma virus (HPV)
 US-11-021-949-29

Query Match 93.8%; Score 45; DB 6; Length 158;
 Best Local Similarity 88.9%; Pred. No. 1.9;
 Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
 |||:||||
 Db 47 FAFRDLCIV 55

RESULT 36

US-10-751-845-89
 ; Sequence 89, Application US/10751845
 ; Publication No. US20050100928A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Hedley, Mary Lynne
 ; APPLICANT: Urban, Robert G.
 ; APPLICANT: Chiciz, Roman M.
 ; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
 ; FILE REFERENCE: 08191-013001
 ; CURRENT APPLICATION NUMBER: US/10/751,845
 ; PRIOR FILING DATE: 2004-01-05
 ; PRIOR APPLICATION NUMBER: US/09/664,225
 ; PRIOR FILING DATE: 2000-08-18
 ; PRIOR APPLICATION NUMBER: US 60/169,846
 ; PRIOR FILING DATE: 1999-12-09
 ; PRIOR APPLICATION NUMBER: US 60/154,665
 ; PRIOR FILING DATE: 1999-09-16
 ; NUMBER OF SEQ ID NOS: 163
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 89
 ; LENGTH: 9
 ; TYPE: PRT
 ; ORGANISM: Human Papilloma virus
 US-10-751-845-89

Query Match 91.7%; Score 44; DB 5; Length 9;
 Best Local Similarity 100.0%; Pred. No. 1.7e+06;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCI 8
 |||:||||
 Db 2 FAFRDLCI 9

RESULT 37
 US-11-021-949-19

; Sequence 19, Application US/11021949
 ; Publication No. US20050142541A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LU, PETER
 ; APPLICANT: GARMAN, JONATHAN DAVID
 ; APPLICANT: BELMARES, MICHAEL P.
 ; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
 ; APPLICANT: SCHWEIZER, JOHANNES
 ; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
 ; FILE REFERENCE: VITA-012
 ; CURRENT APPLICATION NUMBER: US/11/021,949
 ; PRIOR FILING DATE: 2004-12-23
 ; PRIOR FILING DATE: 2003-12-23
 ; NUMBER OF SEQ ID NOS: 361
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 19
 ; LENGTH: 148
 ; TYPE: PRT
 ; ORGANISM: human papilloma virus (HPV)
 US-11-021-949-19

Query Match 87.5%; Score 42; DB 6; Length 148;
 Best Local Similarity 88.9%; Pred. No. 6.4;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
 |||:||||
 Db 46 FAFRDLCIV 54

RESULT 38

US-11-021-949-359
 ; Sequence 359, Application US/11021949
 ; Publication No. US20050142541A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LU, PETER
 ; APPLICANT: GARMAN, JONATHAN DAVID
 ; APPLICANT: BELMARES, MICHAEL P.
 ; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
 ; APPLICANT: SCHWEIZER, JOHANNES
 ; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
 ; FILE REFERENCE: VITA-012
 ; CURRENT APPLICATION NUMBER: US/11/021,949
 ; PRIOR FILING DATE: 2004-12-23
 ; PRIOR APPLICATION NUMBER: 60/532,373
 ; PRIOR FILING DATE: 2003-12-23
 ; NUMBER OF SEQ ID NOS: 361
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 359
 ; LENGTH: 148
 ; TYPE: PRT
 ; ORGANISM: human papilloma virus (HPV)
 US-11-021-949-359

Query Match 87.5%; Score 42; DB 6; Length 148;
 Best Local Similarity 77.8%; Pred. No. 6.4;
 Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
 |||:||||
 Db 46 FAFRDLCIV 54

RESULT 39
 US-10-484-063-5
 ; Sequence 5, Application US/10484063
 ; Publication No. US20050048467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: SASTRY, K. JAGANNADHA
 ; APPLICANT: TORTOLERO-LUNA, GUILLERMO

```

; APPLICANT: FOLLEN, MICHELE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-5
```

```

Query Match      83.3%; Score 40; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 FAFRDLG 7
        |||||
Db      4 FAFRDLG 10
```

```

RESULT 40
US-10-751-845-94
; Sequence 94, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Robert M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; PRIOR FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR FILING DATE: 1999-09-16
; PRIOR APPLICATION NUMBER: US 60/154,665
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for windows Version 4.0
; SEQ ID NO 94
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-94
```

```

Query Match      83.3%; Score 40; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 FAFRDLG 7
        |||||
Db      4 FAFRDLG 10
```

```

RESULT 41
US-10-472-533-388
; Sequence 388, Application US/10472533
; Publication No. US20050197285A1
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.
; TITLE OF INVENTION: Human Secreted Proteins
; FILE REFERENCE: PS906PCT
; CURRENT APPLICATION NUMBER: US/10/472,533
; CURRENT FILING DATE: 2003-09-20
; PRIOR APPLICATION NUMBER: US 60/331,287
```

```

; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/306,171
; PRIOR FILING DATE: 2001-07-19
; PRIOR APPLICATION NUMBER: US 60/277,340
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 650
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 388
; LENGTH: 161
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-472-533-388
```

```

Query Match      77.1%; Score 37; DB 5; Length 161;
Best Local Similarity 66.7%; Pred. No. 58;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      1 FAFRDLG 9
        |||:|:|
Db      30 FAFRDLG 38
```

```

RESULT 42
US-10-351-334-160
; Sequence 160, Application US/10351334
; Publication No. US20040034196A1
; GENERAL INFORMATION:
; APPLICANT: Komatsoulis et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P2
; CURRENT APPLICATION NUMBER: US/10/351,334
; PRIOR FILING DATE: 2003-01-27
; PRIOR APPLICATION NUMBER: 60/350,898
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: 09/489,847
; PRIOR FILING DATE: 2000-01-24
; PRIOR APPLICATION NUMBER: PCT/US99/17130
; PRIOR FILING DATE: 1999-07-29
; PRIOR APPLICATION NUMBER: 60/094,657
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: 60/095,486
; PRIOR FILING DATE: 1998-08-05
; PRIOR APPLICATION NUMBER: 60/096,319
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: 60/095,454
; PRIOR FILING DATE: 1998-08-06
; PRIOR APPLICATION NUMBER: 60/095,455
; PRIOR FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 160
; LENGTH: 162
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (162)
; OTHER INFORMATION: Xaa equals stop translation
US-10-351-334-160
```

```

Query Match      77.1%; Score 37; DB 4; Length 162;
Best Local Similarity 66.7%; Pred. No. 58;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      1 FAFRDLG 9
        |||:|:|
Db      30 FAFRDLG 38
```

```

RESULT 43
US-10-264-237-2326
; Sequence 2326, Application US/10264237
; Publication No. US20040009491A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA131P1
; CURRENT APPLICATION NUMBER: US/10/264,237
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/16450
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/205,515
; PRIOR FILING DATE: 2000-05-19
; NUMBER OF SEQ ID NOS: 2876
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 2326
; LENGTH: 205
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-264-237-2326
```

```
Query Match          77.1%; Score 37; DB 4; Length 205;
Best Local Similarity 66.7%; Pred. No. 74;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCTV 9
      |||:|:|
Db      74 FAFABLCV 82
```

```
RESULT 44
US-10-351-334-320
; Sequence 320, Application US/10351334
; Publication No. US20040034196A1
; GENERAL INFORMATION:
; APPLICANT: Komatsoulis et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P2
; CURRENT APPLICATION NUMBER: US/10/351,334
; CURRENT FILING DATE: 2003-01-27
; PRIOR APPLICATION NUMBER: 60/350,898
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: 09/489,847
; PRIOR FILING DATE: 2000-01-24
; PRIOR APPLICATION NUMBER: PCT/US99/17130
; PRIOR FILING DATE: 1999-07-29
; PRIOR APPLICATION NUMBER: 60/094,657
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: 60/095,486
; PRIOR FILING DATE: 1998-08-05
; PRIOR APPLICATION NUMBER: 60/096,319
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: 60/095,454
; PRIOR FILING DATE: 1998-08-06
; PRIOR APPLICATION NUMBER: 60/095,455
; PRIOR FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 320
; LENGTH: 207
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-351-334-320
```

```
Query Match          77.1%; Score 37; DB 4; Length 207;
Best Local Similarity 66.7%; Pred. No. 74;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCTV 9
      |||:|:|
Db      76 FAFABLCV 84
```

```
RESULT 45
US-10-425-115-251824
; Sequence 251824, Application US/10425115
```

```
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovall, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 251824
; LENGTH: 242
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_161248C.1.pep
US-10-425-115-251824
```

```
Query Match          77.1%; Score 37; DB 4; Length 242;
Best Local Similarity 66.7%; Pred. No. 87;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCTV 9
      |||:|:|
Db      205 FGFRLNCLV 213
```

```
RESULT 46
US-10-839-882-8
; Sequence 8, Application US/10839882
; Publication No. US20040203106A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE PHARMACEUTICALS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: HILLMAN, Jennifer L.
; APPLICANT: GUEGLER, Karl J.
; APPLICANT: CORLEY, Neil C.
; APPLICANT: LAL, Preeti
; APPLICANT: AZIMZAI, Valda
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: JUNGUNG, Yang
; APPLICANT: SHIH, Leo L.
; TITLE OF INVENTION: PROLIFERATION AND APOPTOSIS RELATED PROTEINS
; FILE REFERENCE: PF-0619 PCT
; CURRENT APPLICATION NUMBER: US/10/839,882
; CURRENT FILING DATE: 2004-05-05
; PRIOR APPLICATION NUMBER: US/09/807,452
; PRIOR FILING DATE: 2001-04-11
; PRIOR APPLICATION NUMBER: 09/175,737; unassigned; 60/118,559; 09/249,740; unassigned
; 60/154,336
; PRIOR FILING DATE: 1998-10-20; 1998-10-20; 1999-02-04; 1999-04-11;
; 1999-04-22
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PERL Program
; SEQ ID NO 8
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc.feature
; OTHER INFORMATION: Incyte ID No: 3255641CD1
US-10-839-882-8
```

```
Query Match          77.1%; Score 37; DB 4; Length 445;
Best Local Similarity 66.7%; Pred. No. 1,6e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 FAFRDLCTV 9
      |||:|:|
Db      314 FAFABLCV 322
```

```
RESULT 47
US-10-450-763-40696
; Sequence 40696, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: HySeq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 40696
; LENGTH: 459
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-450-763-40696

Query Match
Best Local Similarity 66.7%; Score 37; DB 5; Length 459;
Pred. No. 1.6e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
DB 327 FAFABLCV 335

RESULT 48
US-10-896-169-6
; Sequence 6, Application US/10896169
; Publication No. US20050160498A1
; GENERAL INFORMATION:
; APPLICANT: CHUNG, Yong-Yoon et al.
; TITLE OF INVENTION: A GENE ENCODING CYSTEINE PROTEASE AND ITS PROMOTER WHICH ARE
; TITLE OF INVENTION: EXPRESSED SPECIFICALLY IN RICE ANTER, A METHOD FOR PRODUCING
; TITLE OF INVENTION: MALE STERILE RICE BY SUPPRESSING EXPRESSION OF THE GENE
; FILE REFERENCE: 3884-0122PUS1
; CURRENT APPLICATION NUMBER: US/10/896,169
; CURRENT FILING DATE: 2004-07-22
; PRIOR APPLICATION NUMBER: KR 2004-3156
; PRIOR FILING DATE: 2004-01-16
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 6
; LENGTH: 471
; TYPE: PRT
; ORGANISM: Oryza sativa
US-10-896-169-6

Query Match
Best Local Similarity 66.7%; Score 37; DB 5; Length 471;
Pred. No. 1.7e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
DB 401 FGFRMLCV 409

RESULT 49
US-10-437-963-179845
; Sequence 179845, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 179845
; LENGTH: 473
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(473)
; OTHER INFORMATION: unsure at all Xaa locations
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_77268C.1.pep
US-10-437-963-179845

Query Match
Best Local Similarity 66.7%; Score 37; DB 4; Length 473;
Pred. No. 1.7e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
DB 402 FGFRMLCV 410

RESULT 50
US-09-978-295A-7
; Sequence 7, Application US/09978295A
; Patent No. US20020156006A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerltsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630P1C11
; CURRENT APPLICATION NUMBER: US/09/978,295A
; CURRENT FILING DATE: 2001-10-15
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
```


; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085582
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085700
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085689
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697

Query Match 77.1%; Score 37; DB 3; Length 492;
Best Local Similarity 66.7%; Pred. No. 1.8e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FAFRDLCIV 9
|||:|:|
Db 361 FAFAEICV 369

Search completed: May 5, 2006, 08:39:38
Job time : 62 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:29:56 ; Search time 8.4 Seconds
(without alignments)
49.591 Million cell updates/sec

Title: US-08-170-344-10
Perfect score: 48
Sequence: 1 FAFRDLCTIV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published Applications_AA_New.*
1: /SID55/ptodata/1/pubppaa/US08_NEW_PUB.pep1.*
2: /SID55/ptodata/1/pubppaa/US06_NEW_PUB.pep.*
3: /SID55/ptodata/1/pubppaa/US07_NEW_PUB.pep.*
4: /SID55/ptodata/1/pubppaa/US08_NEW_PUB.pep.*
5: /SID55/ptodata/1/pubppaa/PCR_NEW_PUB.pep.*
6: /SID55/ptodata/1/pubppaa/US06_NEW_PUB.pep.*
7: /SID55/ptodata/1/pubppaa/US09_NEW_PUB.pep.*
8: /SID55/ptodata/1/pubppaa/US10_NEW_PUB.pep.*
9: /SID55/ptodata/1/pubppaa/US11_NEW_PUB.pep.*
10: /SID55/ptodata/1/pubppaa/US11_NEW_PUB.pep.*
11: /SID55/ptodata/1/pubppaa/US11_NEW_PUB.pep.*
12: /SID55/ptodata/1/pubppaa/US60_NEW_PUB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	48	100.0	151	9	US-10-530-253-13
2	48	100.0	158	11	US-11-206-138-3
3	48	100.0	248	9	US-10-530-253-1
4	48	100.0	248	9	US-10-530-253-3
5	48	100.0	248	9	US-10-530-253-5
6	48	100.0	248	9	US-10-530-253-7
7	48	100.0	248	9	US-10-530-253-9
8	48	100.0	248	9	US-10-530-253-11
9	48	100.0	256	11	US-11-192-923A-2
10	48	93.8	158	9	US-10-530-253-20
11	44	91.7	11	9	US-10-530-061-780
12	42	87.5	9	9	US-10-530-061-800
13	42	87.5	10	9	US-10-530-061-500
14	41	85.4	11	9	US-10-530-061-784
15	41	85.4	158	9	US-10-530-253-26
16	39	81.2	9	9	US-10-530-061-77
17	39	81.2	9	9	US-10-530-061-799
18	39	81.2	9	9	US-10-530-061-821
19	39	81.2	10	9	US-10-530-061-566
20	37	77.1	162	11	US-11-229-769-160
21	37	77.1	207	11	US-11-229-769-320

22	77.1	492	9	US-10-216-161A-7	Sequence 7, Appli
23	75.0	9	9	US-10-530-061-91	Sequence 91, Appl
24	75.0	9	9	US-10-530-061-820	Sequence 820, App
25	72.9	50	11	US-11-096-568A-8334	Sequence 8334, Ap
26	72.9	377	11	US-11-096-568A-32628	Sequence 32628, A
27	72.9	386	11	US-11-096-568A-32627	Sequence 32627, A
28	70.8	10	9	US-10-530-061-499	Sequence 499, App
29	70.8	439	11	US-11-096-568A-15982	Sequence 15982, A
30	70.8	439	11	US-11-096-568A-17183	Sequence 17183, A
31	70.8	462	11	US-11-096-568A-15981	Sequence 15981, A
32	70.8	470	11	US-11-096-568A-17182	Sequence 17182, A
33	70.8	470	11	US-11-096-568A-15980	Sequence 15980, A
34	70.8	505	11	US-11-096-568A-17181	Sequence 17181, A
35	68.8	10	9	US-10-530-061-1660	Sequence 519, App
36	68.8	15	9	US-10-530-061-1661	Sequence 1660, Ap
37	68.8	15	9	US-10-530-061-1661	Sequence 1661, Ap
38	68.8	149	9	US-10-530-253-18	Sequence 18, Appl
39	68.8	158	9	US-10-530-253-15	Sequence 15, Appl
40	68.8	175	9	US-10-965-694-23	Sequence 23, Appl
41	68.8	214	11	US-11-098-686-10210	Sequence 10210, A
42	68.8	288	9	US-10-525-907-44	Sequence 44, Appl
43	68.8	295	11	US-11-188-298-20322	Sequence 20322, A
44	68.8	364	11	US-11-096-568A-24125	Sequence 24125, A
45	68.8	382	11	US-11-096-568A-24124	Sequence 24124, A
46	68.8	405	11	US-11-096-568A-24123	Sequence 24123, A
47	66.7	10	9	US-10-530-061-477	Sequence 477, App
48	66.7	10	9	US-10-530-061-565	Sequence 565, App
49	66.7	15	9	US-10-530-061-1668	Sequence 1668, Ap
50	66.7	15	9	US-10-530-061-1669	Sequence 1669, Ap
51	66.7	15	9	US-10-530-061-1670	Sequence 1670, Ap
52	66.7	15	11	US-11-023-266-137	Sequence 137, App
53	66.7	15	11	US-11-233-266-137	Sequence 137, App
54	66.7	149	9	US-10-530-253-16	Sequence 16, Appl
55	66.7	160	9	US-10-490-823-25	Sequence 25, Appl
56	66.7	685	9	US-11-152-601-22	Sequence 22, Appl
57	66.7	695	11	US-10-530-061-478	Sequence 478, App
58	64.6	15	9	US-10-530-061-1674	Sequence 1674, Ap
59	64.6	15	9	US-10-530-061-1675	Sequence 1675, Ap
60	64.6	15	9	US-10-530-061-1676	Sequence 1676, Ap
61	64.6	15	9	US-10-530-061-1677	Sequence 1677, Ap
62	64.6	75	11	US-11-264-096-2015	Sequence 2015, Ap
63	64.6	101	11	US-11-096-568A-14205	Sequence 14205, A
64	64.6	135	11	US-11-096-568A-14203	Sequence 14203, A
65	64.6	149	9	US-10-530-253-17	Sequence 17, Appl
66	64.6	152	9	US-10-530-253-39	Sequence 39, Appl
67	64.6	176	9	US-10-965-694-27	Sequence 27, Appl
68	64.6	248	9	US-10-511-538-237	Sequence 237, App
69	64.6	332	11	US-11-096-568A-10014	Sequence 10014, A
70	64.6	374	11	US-11-096-568A-10013	Sequence 10013, A
71	64.6	393	11	US-11-012-522-14	Sequence 14, Appl
72	64.6	468	9	US-10-511-988-164	Sequence 164, App
73	64.6	474	11	US-11-188-298-9914	Sequence 9914, Ap
74	64.6	480	9	US-10-915-002-299	Sequence 18711, A
75	64.6	480	9	US-10-841-129-2	Sequence 299, App
76	64.6	926	9	US-11-087-099-345	Sequence 345, App
77	64.6	1027	11	US-11-188-298-10438	Sequence 10338, A
78	64.6	1394	11	US-11-188-298-13354	Sequence 13354, A
79	64.6	2186	11	US-11-096-568A-28283	Sequence 28283, A
80	64.6	2199	11	US-11-096-568A-28282	Sequence 28282, A
81	64.6	2301	11	US-11-096-568A-28281	Sequence 28281, A
82	62.5	18	11	US-11-106-415-326	Sequence 326, App
83	62.5	18	11	US-11-233-266-336	Sequence 326, App
84	62.5	138	11	US-11-079-426-7197	Sequence 7197, Ap
85	62.5	158	9	US-10-530-253-19	Sequence 19, Appl
86	62.5	175	11	US-11-096-568A-15950	Sequence 15950, A
87	62.5	206	11	US-11-096-568A-15948	Sequence 15948, A
88	62.5	225	11	US-11-096-568A-15949	Sequence 15949, A
89	62.5	288	11	US-11-188-298-21619	Sequence 21619, A
90	62.5	311	11	US-11-096-568A-11261	Sequence 31261, A
91	62.5	314	11	US-11-096-568A-18991	Sequence 18991, A
92	62.5	338	11	US-11-096-568A-11260	Sequence 31260, A
93	62.5	354	11	US-11-188-298-7657	Sequence 7657, Ap
94	62.5	354	11	US-11-188-298-7657	Sequence 7657, Ap

95	62.5	354	11	US-11-188-298-13074	Sequence 11074, A	168	28	58.3	131	11	US-11-087-099-493	Sequence 493, App
96	62.5	354	11	US-11-188-298-18759	Sequence 18759, A	169	28	58.3	139	11	US-11-188-298-6255	Sequence 6255, App
97	62.5	353	9	US-11-188-298-19833	Sequence 19833, A	170	28	58.3	166	11	US-11-087-099-12450	Sequence 12450, A
98	62.5	393	9	US-10-467-657-1038	Sequence 1038, Ap	171	28	58.3	166	11	US-11-172-740-218	Sequence 218, App
99	62.5	413	11	US-11-096-568A-11259	Sequence 31259, A	172	28	58.3	173	11	US-11-096-568A-10512	Sequence 10512, A
100	62.5	443	11	US-11-096-568A-18990	Sequence 18990, A	173	28	58.3	169	11	US-11-087-099-3684	Sequence 3684, A
101	62.5	475	11	US-11-188-298-955	Sequence 955, App	174	28	58.3	178	11	US-11-087-099-6882	Sequence 6882, App
102	62.5	475	11	US-11-188-298-17284	Sequence 17284, A	175	28	58.3	179	11	US-11-087-099-4692	Sequence 4692, App
103	62.5	492	11	US-11-079-463-9593	Sequence 9593, Ap	176	28	58.3	182	11	US-11-087-099-6738	Sequence 6738, Ap
104	62.5	1454	11	US-11-109-157A-2	Sequence 2, Appl1	177	28	58.3	188	11	US-11-087-099-1102	Sequence 1102, App
105	62.5	1686	11	US-11-109-157A-1	Sequence 1, Appl1	178	28	58.3	188	11	US-11-087-099-2702	Sequence 2702, App
106	62.5	1686	11	US-11-226-701-2	Sequence 2, Appl1	179	28	58.3	195	11	US-11-096-568A-11330	Sequence 11330, A
107	62.5	2911	11	US-11-090-617-706	Sequence 706, App	180	28	58.3	188	11	US-11-096-568A-10511	Sequence 10511, A
108	60.4	10	9	US-10-530-061-518	Sequence 518, App	181	28	58.3	205	11	US-11-096-568A-26544	Sequence 26544, A
109	60.4	17	11	US-11-129-741-3211	Sequence 3211, Ap	182	28	58.3	209	11	US-11-188-298-17789	Sequence 17789, A
110	60.4	67	11	US-11-096-568A-7722	Sequence 7722, Ap	183	28	58.3	212	11	US-11-096-568A-11329	Sequence 11329, A
111	60.4	169	9	US-10-965-694-25	Sequence 25, Appl1	184	28	58.3	244	9	US-10-467-657-6538	Sequence 2638, Ap
112	60.4	222	9	US-10-784-004-665	Sequence 665, App	185	28	58.3	245	11	US-11-096-568A-6210	Sequence 6210, Ap
113	60.4	223	9	US-10-784-004-343	Sequence 343, App	186	28	58.3	245	11	US-11-188-298-11863	Sequence 11863, A
114	60.4	234	11	US-11-072-512-2791	Sequence 2791, Ap	187	28	58.3	265	11	US-11-096-568A-20816	Sequence 20816, A
115	60.4	245	9	US-10-467-657-7884	Sequence 7884, Ap	188	28	58.3	278	11	US-11-096-568A-62093	Sequence 6209, Ap
116	60.4	269	9	US-10-455-772-140	Sequence 140, App	189	28	58.3	283	11	US-11-096-568A-25183	Sequence 25183, A
117	60.4	269	9	US-10-455-772-832	Sequence 832, App	190	28	58.3	292	9	US-10-467-657-5564	Sequence 5564, Ap
118	60.4	273	9	US-10-455-772-136	Sequence 136, App	191	28	58.3	292	9	US-10-525-907-46	Sequence 46, Appl1
119	60.4	273	9	US-10-455-772-836	Sequence 836, App	192	28	58.3	292	11	US-11-188-298-2760	Sequence 2760, App
120	60.4	273	9	US-10-455-772-838	Sequence 838, App	193	28	58.3	292	11	US-11-188-298-61084	Sequence 6084, Ap
121	60.4	273	9	US-10-455-772-840	Sequence 840, App	194	28	58.3	298	11	US-11-188-298-21003	Sequence 21003, A
122	60.4	298	11	US-11-087-099-7232	Sequence 7232, Ap	195	28	58.3	304	9	US-10-467-657-7616	Sequence 7616, Ap
123	60.4	313	9	US-10-455-772-848	Sequence 848, App	196	28	58.3	309	11	US-11-087-099-10759	Sequence 10759, A
124	60.4	313	9	US-10-455-772-854	Sequence 854, App	197	28	58.3	317	11	US-11-096-568A-20815	Sequence 20815, A
125	60.4	314	11	US-11-096-568A-21951	Sequence 21951, A	198	28	58.3	321	11	US-11-172-740-39	Sequence 39, Appl1
126	60.4	315	9	US-10-455-772-134	Sequence 134, App	199	28	58.3	324	11	US-11-096-568A-14707	Sequence 14707, A
127	60.4	315	9	US-10-455-772-138	Sequence 138, App	200	28	58.3	341	11	US-11-096-568A-16391	Sequence 16391, A
128	60.4	315	9	US-10-455-772-142	Sequence 142, App	201	28	58.3	342	11	US-11-096-568A-14706	Sequence 14706, A
129	60.4	315	9	US-10-455-772-834	Sequence 834, App	202	28	58.3	343	11	US-11-096-568A-17082	Sequence 7082, App
130	60.4	315	9	US-10-455-772-846	Sequence 846, App	203	28	58.3	355	11	US-11-096-568A-14705	Sequence 14705, A
131	60.4	320	9	US-10-455-772-842	Sequence 842, App	204	28	58.3	379	11	US-11-096-568A-7081	Sequence 7081, App
132	60.4	321	11	US-11-096-568A-21950	Sequence 21950, A	205	28	58.3	387	11	US-11-188-298-8419	Sequence 8419, Ap
133	60.4	347	11	US-11-096-568A-411	Sequence 411, App	206	28	58.3	387	11	US-11-188-298-9530	Sequence 9530, Ap
134	60.4	354	11	US-11-188-298-2415	Sequence 2415, Ap	207	28	58.3	389	11	US-11-188-298-1744	Sequence 1744, Ap
135	60.4	354	11	US-11-188-298-3950	Sequence 3950, Ap	208	28	58.3	389	11	US-11-188-298-11085	Sequence 11085, A
136	60.4	354	11	US-11-188-298-12291	Sequence 12291, A	209	28	58.3	389	11	US-11-188-298-19818	Sequence 19855, A
137	60.4	354	11	US-11-188-298-12446	Sequence 12446, A	210	28	58.3	391	11	US-11-188-298-14304	Sequence 3622, App
138	60.4	427	11	US-11-096-568A-410	Sequence 410, App	211	28	58.3	391	11	US-11-188-298-13136	Sequence 14304, A
139	60.4	473	11	US-11-096-568A-409	Sequence 409, App	212	28	58.3	395	11	US-11-188-298-13196	Sequence 1396, Ap
140	60.4	473	11	US-11-096-568A-412	Sequence 412, App	213	28	58.3	395	11	US-11-188-298-3615	Sequence 3615, Ap
141	60.4	512	11	US-11-087-099-7490	Sequence 7490, A	214	28	58.3	396	11	US-11-188-298-5731	Sequence 5731, Ap
142	60.4	512	11	US-11-188-298-22498	Sequence 22498, A	215	28	58.3	397	11	US-11-188-298-20463	Sequence 20463, A
143	60.4	555	11	US-11-034-5569-8	Sequence 8, Appl1	216	28	58.3	420	11	US-11-087-099-8718	Sequence 8718, Ap
144	60.4	555	11	US-11-096-568A-21949	Sequence 21949, A	217	28	58.3	434	11	US-11-188-298-10075	Sequence 10075, A
145	60.4	574	9	US-10-330-773-488	Sequence 488, App	218	28	58.3	435	11	US-11-087-099-6985	Sequence 6985, Ap
146	60.4	595	9	US-10-510-386-240	Sequence 240, App	219	28	58.3	435	11	US-11-188-298-17434	Sequence 17434, A
147	60.4	717	9	US-10-624-932-12	Sequence 12, Appl1	220	28	58.3	457	11	US-11-194-246-326	Sequence 326, App
148	60.4	722	9	US-10-793-626-1230	Sequence 1230, App	221	28	58.3	504	11	US-11-087-099-9816	Sequence 9816, App
149	60.4	731	11	US-11-1045-004-2406	Sequence 2406, Ap	222	28	58.3	510	11	US-11-045-004-1629	Sequence 1629, Ap
150	60.4	740	11	US-11-188-298-20749	Sequence 20749, A	223	28	58.3	512	11	US-11-087-099-3997	Sequence 3997, Ap
151	60.4	935	9	US-10-330-773-59	Sequence 59, Appl1	224	28	58.3	514	11	US-11-087-099-3612	Sequence 3612, Ap
152	60.4	1027	11	US-11-079-463-8899	Sequence 8899, Ap	225	28	58.3	516	11	US-11-087-099-11500	Sequence 11500, A
153	60.4	1049	11	US-11-137-465-42	Sequence 42, Appl1	226	28	58.3	526	11	US-11-087-099-9483	Sequence 9483, Ap
154	60.4	2767	11	US-11-100-640-38	Sequence 38, Appl1	227	28	58.3	526	11	US-11-188-298-8800	Sequence 8800, Ap
155	60.4	2768	9	US-10-510-101-72	Sequence 72, Appl1	228	28	58.3	532	8	US-10-511-937-4495	Sequence 2495, Ap
156	58.3	10	9	US-10-530-061-791	Sequence 791, App	229	28	58.3	532	9	US-10-063-703-72	Sequence 72, Appl1
157	58.3	10	9	US-10-530-061-849	Sequence 849, App	230	28	58.3	532	9	US-10-199-487-264	Sequence 264, App
158	58.3	47	11	US-11-004-339-2251	Sequence 2251, Ap	231	28	58.3	532	9	US-10-199-883-264	Sequence 264, App
159	58.3	59	11	US-10-467-657-6690	Sequence 6690, Ap	232	28	58.3	532	9	US-10-195-888-264	Sequence 264, App
160	58.3	65	11	US-11-079-463-9875	Sequence 9875, Ap	233	28	58.3	532	9	US-10-195-889-264	Sequence 264, App
161	58.3	84	11	US-11-229-769-157	Sequence 157, App	234	28	58.3	532	11	US-11-102-420-72	Sequence 72, Appl1
162	58.3	85	9	US-10-467-657-6674	Sequence 6674, App	235	28	58.3	532	11	US-11-103-195-701	Sequence 72, Appl1
163	58.3	92	11	US-11-229-769-319	Sequence 319, App	236	28	58.3	561	11	US-11-090-617-562	Sequence 562, App
164	58.3	93	11	US-11-004-339-1770	Sequence 1770, Ap	237	28	58.3	576	11	US-11-087-099-3836	Sequence 3836, App
165	58.3	100	11	US-11-096-568A-6932	Sequence 6932, Ap	238	28	58.3	646	11	US-11-079-463-9123	Sequence 9123, Ap
166	58.3	104	9	US-10-467-657-7314	Sequence 7314, Ap	239	28	58.3	668	11	US-11-113-424-12	Sequence 12, Appl1
167	58.3	120	11	US-11-188-298-3782	Sequence 3782, Ap	240	28	58.3	689	11	US-11-113-424-47	Sequence 47, Appl1

241	28	59.3	689	11	US-11-040-218-1	Sequence 1, Appl1	314	27	56.2	286	11	US-11-137-465-48	Sequence 48, Appl1
242	28	59.3	689	11	US-11-040-218-3	Sequence 3, Appl1	315	27	56.2	287	11	US-11-096-568A-12643	Sequence 12643, A
243	28	59.3	689	11	US-11-040-218-29	Sequence 29, Appl1	316	27	56.2	289	11	US-11-079-463-5931	Sequence 5931, Ap
244	28	59.3	689	11	US-11-040-218-31	Sequence 31, Appl1	317	27	56.2	292	11	US-11-188-298-5275	Sequence 5275, Ap
245	28	59.3	689	11	US-11-040-218-33	Sequence 33, Appl1	318	27	56.2	293	11	US-11-188-298-6397	Sequence 6397, Ap
246	28	59.3	729	11	US-11-096-568A-27562	Sequence 27562, A	319	27	56.2	292	11	US-11-188-298-20621	Sequence 20621, A
247	28	59.3	729	11	US-11-096-568A-27561	Sequence 27561, A	320	27	56.2	294	11	US-11-188-298-17088	Sequence 17088, A
248	28	59.3	801	9	US-10-508-307-8	Sequence 8, Appl1	321	27	56.2	294	11	US-11-188-298-18623	Sequence 18623, A
249	28	59.3	812	9	US-11-188-298-17199	Sequence 17199, A	322	27	56.2	295	9	US-10-525-997-28	Sequence 28, Appl1
250	28	59.3	822	11	US-11-169-041-137	Sequence 137, App	323	27	56.2	295	11	US-11-188-298-11214	Sequence 11214, A
251	28	59.3	892	11	US-11-096-568A-27560	Sequence 27560, A	324	27	56.2	295	11	US-11-188-298-21022	Sequence 21022, A
252	28	59.3	928	9	US-10-841-129-4	Sequence 4, Appl1	325	27	56.2	296	9	US-10-858-730-229	Sequence 229, App
253	28	59.3	928	9	US-10-841-129-6	Sequence 6, Appl1	326	27	56.2	296	9	US-10-525-997-32	Sequence 32, Appl1
254	28	59.3	969	11	US-11-096-568A-30346	Sequence 30346, A	327	27	56.2	296	9	US-10-525-997-10	Sequence 34, Appl1
255	28	59.3	979	11	US-11-096-568A-30345	Sequence 30345, A	328	27	56.2	296	11	US-11-188-298-5451	Sequence 5451, Ap
256	28	59.3	982	11	US-11-079-463-8232	Sequence 8232, A	329	27	56.2	296	11	US-11-188-298-8405	Sequence 8405, Ap
257	28	59.3	1055	11	US-11-096-568A-30344	Sequence 30344, A	330	27	56.2	296	11	US-11-188-298-12765	Sequence 12765, A
258	28	59.3	1659	9	US-10-508-307-1	Sequence 1, Appl1	331	27	56.2	296	11	US-11-188-298-19927	Sequence 19927, A
259	28	59.3	1659	11	US-11-072-175-205	Sequence 1,205, App	332	27	56.2	296	11	US-11-188-298-15208	Sequence 15208, A
260	28	59.3	1821	8	US-10-505-928-451	Sequence 451, App	333	27	56.2	296	11	US-11-188-298-19927	Sequence 19927, A
261	27.5	57.3	424	11	US-11-098-686-10445	Sequence 10445, A	334	27	56.2	297	11	US-11-188-298-6707	Sequence 6707, Ap
262	27	56.2	9	9	US-10-530-061-798	Sequence 798, App	335	27	56.2	297	11	US-11-188-298-18975	Sequence 18975, A
263	27	56.2	10	9	US-10-530-061-521	Sequence 521, App	336	27	56.2	297	11	US-10-525-997-26	Sequence 26, Appl1
264	27	56.2	13	11	US-11-041-893-82	Sequence 82, Appl1	337	27	56.2	298	9	US-11-188-298-2374	Sequence 2374, Ap
265	27	56.2	13	9	US-10-895-064-279	Sequence 279, App	338	27	56.2	299	11	US-11-096-568A-16660	Sequence 16660, A
266	27	56.2	17	11	US-11-129-741-279	Sequence 741, App	339	27	56.2	299	11	US-11-188-298-11942	Sequence 11942, A
267	27	56.2	18	11	US-11-106-415-352	Sequence 352, App	340	27	56.2	300	11	US-11-188-298-14965	Sequence 14965, A
268	27	56.2	18	11	US-11-233-256-352	Sequence 352, App	341	27	56.2	300	11	US-11-188-298-1102	Sequence 1102, Ap
269	27	56.2	20	11	US-11-106-415-47	Sequence 47, Appl1	342	27	56.2	304	9	US-10-506-454-1102	Sequence 36, Appl1
270	27	56.2	20	11	US-11-233-256-47	Sequence 47, Appl1	343	27	56.2	304	9	US-10-506-454-1102	Sequence 36, Appl1
271	27	56.2	52	9	US-10-467-657-982	Sequence 982, App	344	27	56.2	304	11	US-11-079-463-6327	Sequence 6327, Ap
272	27	56.2	52	9	US-11-264-096-580	Sequence 580, App	345	27	56.2	304	11	US-11-098-686-10572	Sequence 10572, A
273	27	56.2	61	11	US-11-264-096-581	Sequence 581, App	346	27	56.2	304	11	US-11-096-568A-16859	Sequence 16859, A
274	27	56.2	61	11	US-11-264-096-582	Sequence 582, App	347	27	56.2	304	11	US-11-096-568A-1222	Sequence 1222, Ap
275	27	56.2	61	11	US-11-264-096-582	Sequence 582, App	348	27	56.2	304	11	US-11-096-568A-12642	Sequence 12642, Ap
276	27	56.2	61	11	US-11-264-096-582	Sequence 582, App	349	27	56.2	304	11	US-11-188-298-18760	Sequence 18760, A
277	27	56.2	62	9	US-10-467-657-8943	Sequence 8943, Ap	350	27	56.2	311	11	US-11-188-298-18760	Sequence 18760, A
278	27	56.2	62	9	US-11-079-463-7492	Sequence 7492, Ap	351	27	56.2	311	11	US-11-188-298-18760	Sequence 18760, A
279	27	56.2	69	9	US-10-986-501-130	Sequence 130, Appl1	352	27	56.2	315	11	US-11-087-099-8598	Sequence 8598, Ap
280	27	56.2	92	11	US-11-126-468-22	Sequence 22, Appl1	353	27	56.2	315	11	US-11-188-298-18999	Sequence 18999, A
281	27	56.2	105	11	US-11-079-463-6813	Sequence 6813, Ap	354	27	56.2	322	11	US-11-045-004-63	Sequence 482, Appl1
282	27	56.2	110	11	US-11-188-298-17479	Sequence 17479, A	355	27	56.2	322	11	US-11-116-881A-482	Sequence 5706, Ap
283	27	56.2	116	11	US-11-096-568A-24625	Sequence 24625, A	356	27	56.2	326	11	US-11-188-298-5706	Sequence 136, App
284	27	56.2	141	9	US-10-982-145-72	Sequence 72, Appl1	357	27	56.2	338	9	US-10-467-657-136	Sequence 6798, Ap
285	27	56.2	141	9	US-10-982-145-73	Sequence 73, Appl1	358	27	56.2	338	9	US-11-087-099-4169	Sequence 4169, Ap
286	27	56.2	161	9	US-10-965-694-12	Sequence 12, Appl1	359	27	56.2	346	11	US-11-096-568A-12641	Sequence 9921, Ap
287	27	56.2	161	9	US-10-965-694-17	Sequence 17, Appl1	360	27	56.2	353	11	US-11-087-099-9921	Sequence 1695, Ap
288	27	56.2	161	11	US-11-239-325-10	Sequence 10, Appl1	361	27	56.2	355	11	US-11-087-099-1695	Sequence 1315, Ap
289	27	56.2	162	11	US-11-087-099-4182	Sequence 4182, Ap	362	27	56.2	363	9	US-10-506-454-1315	Sequence 342, App
290	27	56.2	163	9	US-10-821-234-1356	Sequence 1356, Ap	363	27	56.2	364	9	US-10-131-826A-342	Sequence 342, App
291	27	56.2	163	9	US-10-965-694-1	Sequence 87, Appl1	364	27	56.2	364	9	US-10-137-873A-342	Sequence 342, App
292	27	56.2	163	11	US-11-240-769-87	Sequence 100, App	365	27	56.2	364	9	US-10-152-370-342	Sequence 342, App
293	27	56.2	163	11	US-11-240-769-100	Sequence 190, App	366	27	56.2	364	9	US-10-152-370-342	Sequence 2, Appl1
294	27	56.2	163	11	US-11-229-769-190	Sequence 6040, Ap	367	27	56.2	364	11	US-11-091-334-2	Sequence 342, App
295	27	56.2	172	11	US-11-087-099-6040	Sequence 3, Appl1	368	27	56.2	364	11	US-11-290-153-342	Sequence 1597, Ap
296	27	56.2	177	11	US-11-165-963-3	Sequence 3972, Ap	369	27	56.2	368	11	US-11-096-568A-16642	Sequence 16642, A
297	27	56.2	181	11	US-11-087-099-3972	Sequence 337, App	370	27	56.2	372	11	US-11-087-099-1597	Sequence 283, App
298	27	56.2	181	11	US-11-229-769-337	Sequence 8421, Ap	371	27	56.2	376	9	US-10-501-035-283	Sequence 16641, A
299	27	56.2	186	11	US-11-079-463-8421	Sequence 3316, Ap	372	27	56.2	377	11	US-11-096-568A-16641	Sequence 316, App
300	27	56.2	189	11	US-11-087-099-3316	Sequence 886, App	373	27	56.2	381	9	US-10-454-437-316	Sequence 16640, A
301	27	56.2	218	9	US-10-506-454-886	Sequence 16861, A	374	27	56.2	381	11	US-11-096-568A-14165	Sequence 474, App
302	27	56.2	226	11	US-11-165-963-1	Sequence 16861, A	375	27	56.2	383	11	US-11-096-568A-16640	Sequence 12140, A
303	27	56.2	236	11	US-11-096-568A-16861	Sequence 244, App	376	27	56.2	385	11	US-11-116-881A-474	Sequence 3592, Ap
304	27	56.2	246	9	US-10-131-826A-244	Sequence 244, App	377	27	56.2	387	11	US-11-087-099-12140	Sequence 6659, Ap
305	27	56.2	246	9	US-10-973-115B-244	Sequence 244, App	378	27	56.2	388	11	US-11-087-099-3592	Sequence 34164, A
306	27	56.2	246	9	US-10-137-873A-244	Sequence 244, App	379	27	56.2	388	11	US-11-188-298-6659	Sequence 5982, Ap
307	27	56.2	246	9	US-10-152-370-244	Sequence 244, App	380	27	56.2	389	11	US-11-188-298-6659	Sequence 21310, A
308	27	56.2	246	11	US-11-290-153-244	Sequence 28636, A	381	27	56.2	396	11	US-11-096-568A-24164	Sequence 12788, A
309	27	56.2	250	11	US-11-096-568A-28636	Sequence 16908, A	382	27	56.2	398	11	US-11-087-099-5582	Sequence 12506, A
310	27	56.2	259	11	US-11-188-298-16908	Sequence 13057, A	383	27	56.2	407	11	US-11-188-298-21310	Sequence 20936, A
311	27	56.2	265	11	US-11-188-298-13057	Sequence 14909, A	384	27	56.2	408	11	US-11-096-568A-12788	
312	27	56.2	268	11	US-11-087-099-1499	Sequence 14089, A	385	27	56.2	408	11	US-11-188-298-12506	
313	27	56.2	275	11	US-11-188-298-14089	Sequence 14089, A	386	27	56.2	408	11	US-11-188-298-20936	

387	27	56.2	414	11	US-11-096-568A-32963	Sequence 32963, A	460	27	56.2	879	11	US-11-077-550-159	Sequence 159, App
388	27	56.2	422	9	US-10-336-263A-4	Sequence 4, Appl1	461	27	56.2	879	11	US-11-188-298-10994	Sequence 10994, A
389	27	56.2	423	9	US-10-336-263A-12	Sequence 12, Appl	462	27	56.2	894	11	US-11-077-550-4	Sequence 4, Appl1
390	27	56.2	423	9	US-10-336-263A-10	Sequence 10, Appl	463	27	56.2	907	11	US-11-077-550-16	Sequence 16, Appl
391	27	56.2	424	11	US-11-087-009-999	Sequence 999, App	464	27	56.2	908	11	US-11-077-550-64	Sequence 64, Appl
392	27	56.2	424	11	US-11-146-428-46	Sequence 46, Appl	465	27	56.2	914	11	US-11-077-550-64	Sequence 60, Appl
393	27	56.2	425	9	US-10-536-263A-2	Sequence 2, Appl1	466	27	56.2	916	11	US-11-096-568A-32061	Sequence 32061, A
394	27	56.2	425	11	US-11-087-009-3788	Sequence 3788, Ap	467	27	56.2	939	11	US-11-096-568A-32060	Sequence 32060, A
395	27	56.2	425	11	US-11-096-568A-12787	Sequence 12787, A	468	27	56.2	949	11	US-11-077-550-68	Sequence 68, Appl
396	27	56.2	425	11	US-11-188-298-14539	Sequence 14539, A	469	27	56.2	953	11	US-11-077-550-14	Sequence 14, Appl
397	27	56.2	429	11	US-11-096-568A-7221	Sequence 7221, Ap	470	27	56.2	955	11	US-11-096-568A-29141	Sequence 29141, A
398	27	56.2	430	11	US-11-188-298-12301	Sequence 12301, A	471	27	56.2	1013	11	US-11-077-550-18	Sequence 18, Appl
399	27	56.2	449	11	US-11-079-463-9038	Sequence 9038, A	472	27	56.2	1015	11	US-11-077-550-18	Sequence 21140, A
400	27	56.2	450	11	US-11-096-568A-32962	Sequence 32962, A	473	27	56.2	1031	9	US-11-096-568A-29139	Sequence 29139, A
401	27	56.2	453	11	US-11-096-568A-32961	Sequence 32961, A	474	27	56.2	1051	9	US-10-204-639-15	Sequence 15, Appl
402	27	56.2	462	11	US-11-000-463-456	Sequence 456, App	475	27	56.2	1067	11	US-11/062	Sequence 3, Appl1
403	27	56.2	462	11	US-11-096-568A-12786	Sequence 12786, A	476	27	56.2	1076	9	US-10-902-137-6	Sequence 6, Appl1
404	27	56.2	463	11	US-11-087-009-9184	Sequence 9184, Ap	477	27	56.2	1092	11	US-11/062	Sequence 6, Appl1
405	27	56.2	467	11	US-11-087-009-4884	Sequence 4884, Ap	478	27	56.2	1098	11	US-11-072-512-2475	Sequence 2475, Ap
406	27	56.2	469	11	US-11-087-009-1004	Sequence 1004, Ap	479	27	56.2	1110	9	US-10-902-137-4	Sequence 4, Appl1
407	27	56.2	480	9	US-10-336-263A-8	Sequence 8, Appl1	480	27	56.2	1127	11	US-11-077-550-40	Sequence 40, Appl
408	27	56.2	481	11	US-11-096-568A-7220	Sequence 7220, Ap	481	27	56.2	1127	11	US-11-077-550-50	Sequence 50, Appl
409	27	56.2	526	11	US-11-096-568A-34163	Sequence 34163, A	482	27	56.2	1127	11	US-11-077-550-54	Sequence 54, Appl
410	27	56.2	544	11	US-11-188-298-9124	Sequence 9124, Ap	483	27	56.2	1127	11	US-11-077-550-58	Sequence 58, Appl
411	27	56.2	544	11	US-11-188-298-9865	Sequence 9865, Ap	484	27	56.2	1129	11	US-11-077-550-42	Sequence 42, Appl
412	27	56.2	545	11	US-11-188-298-3478	Sequence 3478, Ap	485	27	56.2	1129	11	US-11-077-550-48	Sequence 48, Appl
413	27	56.2	563	11	US-11-188-298-22102	Sequence 22102, A	486	27	56.2	1129	11	US-11-077-550-52	Sequence 52, Appl
414	27	56.2	571	9	US-10-216-161A-132	Sequence 132, App	487	27	56.2	1129	11	US-11-077-550-56	Sequence 56, Appl
415	27	56.2	589	11	US-11-087-009-2960	Sequence 2960, Ap	488	27	56.2	1130	11	US-11-077-550-44	Sequence 44, Appl
416	27	56.2	589	11	US-11-087-009-3314	Sequence 3314, Ap	489	27	56.2	1130	11	US-11-077-550-139	Sequence 139, Appl
417	27	56.2	589	11	US-11-087-009-5988	Sequence 5988, Ap	490	27	56.2	1132	11	US-11-077-550-46	Sequence 46, Appl
418	27	56.2	589	11	US-11-087-009-7619	Sequence 7619, Ap	491	27	56.2	1131	9	US-10-453-372-1106	Sequence 1106, Ap
419	27	56.2	590	11	US-11-087-009-8075	Sequence 8075, Ap	492	27	56.2	1436	9	US-10-453-372-1092	Sequence 1092, Ap
420	27	56.2	591	11	US-11-087-009-5735	Sequence 5735, Ap	493	27	56.2	1593	9	US-10-453-372-12	Sequence 12, App
421	27	56.2	592	11	US-11-188-298-422	Sequence 422, App	494	27	56.2	1613	9	US-10-055-877-145	Sequence 145, App
422	27	56.2	639	11	US-11-072-512-3268	Sequence 3268, Ap	495	27	56.2	1637	9	US-10-055-877-144	Sequence 144, App
423	27	56.2	640	11	US-11-087-009-4980	Sequence 4980, Ap	496	27	56.2	1985	9	US-10-501-035-218	Sequence 218, App
424	27	56.2	651	11	US-11-098-666-11428	Sequence 11428, A	497	27	56.2	2339	11	US-11-096-568-181-11	Sequence 11, Appl
425	27	56.2	739	11	US-11-239-325-13	Sequence 13, Appl	498	27	56.2	4443	9	US-11-129-741-3478	Sequence 3478, Ap
426	27	56.2	749	11	US-11-079-463-5493	Sequence 5493, Ap	499	27	56.2	4473	9	US-10-895-064-460	Sequence 460, App
427	27	56.2	770	9	US-10-506-454-252	Sequence 252, App	500	27	56.2	4473	11	US-11-129-741-460	Sequence 460, App
428	27	56.2	783	11	US-11-188-298-9347	Sequence 9347, Ap	501	27	56.2	4473	11	US-11-129-741-460	Sequence 5646, Ap
429	27	56.2	783	11	US-11-188-298-20530	Sequence 20530, A	502	26.5	55.2	98	9	US-10-467-657-5646	Sequence 2, Appl
430	27	56.2	826	11	US-11-087-009-6618	Sequence 6618, Ap	503	26.5	55.2	563	11	US-11-040-021-23	Sequence 1143, Ap
431	27	56.2	838	9	US-10-645-441-9	Sequence 9, Appl1	504	26	54.2	8	11	US-10-895-064-1143	Sequence 1143, Ap
432	27	56.2	839	9	US-10-725-475-6	Sequence 6, Appl1	505	26	54.2	10	9	US-10-530-061-535	Sequence 535, App
433	27	56.2	841	9	US-11-050-804-4	Sequence 4, Appl1	506	26	54.2	13	11	US-11-129-741-4141	Sequence 4141, Ap
434	27	56.2	841	11	US-10-501-035-305	Sequence 305, App	507	26	54.2	15	9	US-10-530-061-1696	Sequence 1696, Ap
435	27	56.2	844	11	US-11-127-877-40	Sequence 40, Appl	508	26	54.2	15	9	US-10-530-061-1697	Sequence 1697, Ap
436	27	56.2	863	11	US-11-124-368A-234	Sequence 234, App	509	26	54.2	15	9	US-10-530-061-1709	Sequence 1709, Ap
437	27	56.2	863	11	US-11-077-550-34	Sequence 34, Appl	510	26	54.2	16	9	US-10-928-988-63	Sequence 83, Appl
438	27	56.2	863	11	US-11-077-550-36	Sequence 36, Appl	511	26	54.2	18	11	US-11-106-415-397	Sequence 37, App
439	27	56.2	866	11	US-11-077-550-38	Sequence 38, Appl	512	26	54.2	18	11	US-11-106-415-399	Sequence 39, App
440	27	56.2	866	11	US-11-077-550-32	Sequence 32, Appl	513	26	54.2	18	11	US-11-233-556-397	Sequence 39, App
441	27	56.2	867	9	US-10-725-475-19	Sequence 19, Appl	514	26	54.2	17	11	US-11-233-556-399	Sequence 299, App
442	27	56.2	871	11	US-11-077-550-2	Sequence 2, Appl1	515	26	54.2	18	11	US-11-123-896-294	Sequence 294, App
443	27	56.2	871	11	US-11-077-550-8	Sequence 8, Appl1	516	26	54.2	47	11	US-11-123-896-315	Sequence 315, App
444	27	56.2	871	11	US-11-077-550-26	Sequence 26, Appl	517	26	54.2	47	11	US-11-123-896-357	Sequence 357, App
445	27	56.2	871	11	US-11-077-550-153	Sequence 153, App	518	26	54.2	52	11	US-11-033-105A-13	Sequence 11, Appl
446	27	56.2	871	11	US-11-077-550-155	Sequence 155, App	519	26	54.2	60	9	US-10-467-657-7676	Sequence 7676, Ap
447	27	56.2	873	11	US-11-077-550-6	Sequence 6, Appl1	520	26	54.2	63	11	US-11-090-617-700	Sequence 700, App
448	27	56.2	873	11	US-11-077-550-149	Sequence 149, App	521	26	54.2	68	11	US-11-079-463-6627	Sequence 6627, Ap
449	27	56.2	873	11	US-11-077-550-151	Sequence 151, App	522	26	54.2	68	11	US-11-079-463-8599	Sequence 8599, Ap
450	27	56.2	873	11	US-11-077-550-163	Sequence 163, App	523	26	54.2	70	9	US-10-508-376-21	Sequence 21, Appl
451	27	56.2	873	11	US-11-077-550-165	Sequence 165, App	524	26	54.2	71	9	US-10-508-376-16	Sequence 16, Appl
452	27	56.2	873	11	US-11-077-550-167	Sequence 167, App	525	26	54.2	73	9	US-10-508-376-14	Sequence 14, Appl
453	27	56.2	873	11	US-11-077-550-169	Sequence 169, App	526	26	54.2	73	9	US-10-508-376-15	Sequence 15, Appl
454	27	56.2	875	11	US-11-077-550-10	Sequence 10, Appl	527	26	54.2	73	9	US-10-508-376-17	Sequence 17, Appl
455	27	56.2	876	11	US-11-077-550-66	Sequence 66, Appl	528	26	54.2	73	9	US-10-508-376-18	Sequence 18, Appl
456	27	56.2	877	11	US-11-077-550-157	Sequence 157, App	529	26	54.2	73	9	US-10-508-376-19	Sequence 19, Appl
457	27	56.2	878	11	US-11-077-550-12	Sequence 12, Appl	530	26	54.2	73	9	US-10-508-376-20	Sequence 20, Appl
458	27	56.2	878	11	US-11-077-550-62	Sequence 62, Appl	531	26	54.2	73	9	US-10-508-376-23	Sequence 23, Appl
459	27	56.2	879	11	US-11-077-550-30	Sequence 30, Appl	532	26	54.2	73	9	US-10-508-376-24	Sequence 24, Appl

533	26	54.2	73	9	US-10-508-376-39	Sequence 39, App1	606	26	54.2	265	11	US-11-096-568A-31762	Sequence 31762, A
534	26	54.2	74	9	US-10-508-376-13	Sequence 13, App1	607	26	54.2	269	11	US-11-096-568A-9091	Sequence 9091, Ap
535	26	54.2	76	9	US-10-508-376-22	Sequence 22, App1	608	26	54.2	269	11	US-11-096-568A-9093	Sequence 9093, Ap
536	26	54.2	76	11	US-11-123-896-356	Sequence 356, App	609	26	54.2	269	11	US-11-096-568A-17510	Sequence 17510, A
537	26	54.2	78	11	US-11-123-896-314	Sequence 314, App	610	26	54.2	269	11	US-11-096-568A-31761	Sequence 31761, A
538	26	54.2	79	11	US-11-123-896-293	Sequence 293, App	611	26	54.2	273	9	US-10-353-783-53	Sequence 53, App1
539	26	54.2	91	11	US-11-264-096-1535	Sequence 1535, Ap	612	26	54.2	273	11	US-11-100-640-40	Sequence 40, App1
540	26	54.2	91	11	US-11-264-096-1537	Sequence 1537, Ap	613	26	54.2	276	11	US-11-087-099-6928	Sequence 6928, App1
541	26	54.2	91	11	US-11-087-099-3493	Sequence 3493, Ap	614	26	54.2	276	11	US-11-096-568A-31313	Sequence 31313, A
542	26	54.2	105	11	US-11-087-099-1151	Sequence 1151, Ap	615	26	54.2	279	11	US-11-087-099-12332	Sequence 12332, A
543	26	54.2	107	11	US-11-045-004-1151	Sequence 3918, Ap	616	26	54.2	281	11	US-11-096-568A-31760	Sequence 31760, A
544	26	54.2	111	11	US-11-072-512-3918	Sequence 243, App	617	26	54.2	283	11	US-11-096-568A-2550	Sequence 2550, Ap
545	26	54.2	125	9	US-10-644-807-243	Sequence 336, App	618	26	54.2	288	11	US-11-096-568A-34094	Sequence 34094, A
546	26	54.2	125	9	US-10-644-807-336	Sequence 9290, Ap	619	26	54.2	288	11	US-11-096-568A-11908	Sequence 11908, A
547	26	54.2	125	11	US-11-087-099-9290	Sequence 9272, Ap	620	26	54.2	288	11	US-11-188-298-21222	Sequence 21232, A
548	26	54.2	140	11	US-11-087-099-9272	Sequence 2342, Ap	621	26	54.2	293	11	US-11-096-568A-8860	Sequence 8860, Ap
549	26	54.2	144	9	US-10-467-657-2342	Sequence 24, App1	622	26	54.2	293	11	US-11-096-568A-8862	Sequence 8862, Ap
550	26	54.2	149	9	US-10-530-253-24	Sequence 9082, Ap	623	26	54.2	293	11	US-11-045-004-219	Sequence 219, App
551	26	54.2	153	11	US-11-188-298-9082	Sequence 9082, Ap	624	26	54.2	294	8	US-10-505-928-33	Sequence 33, App1
552	26	54.2	153	11	US-11-188-298-10360	Sequence 10360, A	625	26	54.2	294	11	US-11-188-298-13177	Sequence 13177, A
553	26	54.2	158	11	US-11-188-298-20040	Sequence 20040, A	626	26	54.2	295	11	US-11-079-463-6164	Sequence 6164, Ap
554	26	54.2	161	11	US-11-096-568A-9092	Sequence 9092, Ap	627	26	54.2	296	11	US-11-079-463-6164	Sequence 17509, A
555	26	54.2	165	11	US-11-045-004-2124	Sequence 24915, A	628	26	54.2	298	11	US-11-096-568A-11907	Sequence 11907, A
556	26	54.2	166	11	US-11-096-568A-24915	Sequence 24915, A	629	26	54.2	299	11	US-11-096-568A-10652	Sequence 10652, A
557	26	54.2	171	11	US-11-079-463-7190	Sequence 7190, Ap	630	26	54.2	300	11	US-11-096-568A-11358	Sequence 11358, A
558	26	54.2	172	11	US-11-087-099-12282	Sequence 12282, A	631	26	54.2	300	11	US-11-096-568A-12647	Sequence 12647, A
559	26	54.2	174	11	US-11-087-099-652	Sequence 652, App	632	26	54.2	302	11	US-11-087-099-10537	Sequence 10537, A
560	26	54.2	174	11	US-11-087-099-5618	Sequence 5618, Ap	633	26	54.2	303	9	US-11-087-099-10537	Sequence 10537, A
561	26	54.2	174	11	US-11-087-099-6620	Sequence 6620, Ap	634	26	54.2	304	11	US-11-096-568A-33112	Sequence 33112, A
562	26	54.2	176	9	US-10-965-694-10	Sequence 10713, A	635	26	54.2	312	11	US-11-096-568A-33111	Sequence 33111, A
563	26	54.2	176	9	US-10-965-694-15	Sequence 15, App1	636	26	54.2	312	11	US-11-096-568A-33111	Sequence 11906, A
564	26	54.2	176	9	US-10-965-694-15	Sequence 19, App1	637	26	54.2	313	11	US-11-156-084-254	Sequence 254, App
565	26	54.2	176	11	US-11-087-099-7364	Sequence 7364, Ap	638	26	54.2	315	11	US-11-156-084-254	Sequence 1338, Ap
566	26	54.2	176	11	US-11-188-298-18888	Sequence 18888, A	639	26	54.2	316	11	US-11-096-568A-4699	Sequence 4699, Ap
567	26	54.2	177	11	US-11-144-947-565	Sequence 565, App	640	26	54.2	320	11	US-11-096-568A-8859	Sequence 8859, Ap
568	26	54.2	178	9	US-10-467-657-9141	Sequence 9141, Ap	641	26	54.2	321	9	US-10-455-772-338	Sequence 338, App
569	26	54.2	180	11	US-11-072-512-3076	Sequence 3076, Ap	642	26	54.2	321	9	US-10-455-772-338	Sequence 8907, Ap
570	26	54.2	182	11	US-11-098-686-10828	Sequence 10828, A	643	26	54.2	323	11	US-11-079-463-8907	Sequence 8907, Ap
571	26	54.2	182	11	US-11-087-099-2422	Sequence 2422, Ap	644	26	54.2	324	11	US-11-087-099-11792	Sequence 11792, A
572	26	54.2	182	11	US-11-087-099-3429	Sequence 3429, Ap	645	26	54.2	334	9	US-10-497-135-16	Sequence 16, App1
573	26	54.2	182	11	US-11-087-099-9432	Sequence 9432, Ap	646	26	54.2	334	11	US-11-269-225-15	Sequence 15, App1
574	26	54.2	182	11	US-11-087-099-9708	Sequence 9708, Ap	647	26	54.2	337	9	US-10-497-135-15	Sequence 4698, Ap
575	26	54.2	182	11	US-11-087-099-10821	Sequence 10821, A	648	26	54.2	337	11	US-11-096-568A-6698	Sequence 6698, Ap
576	26	54.2	183	11	US-11-172-740-219	Sequence 219, App	649	26	54.2	337	11	US-11-096-568A-33345	Sequence 33345, A
577	26	54.2	183	11	US-11-087-099-4693	Sequence 4693, Ap	650	26	54.2	337	11	US-11-269-225-15	Sequence 15, App1
578	26	54.2	183	11	US-11-045-004-2506	Sequence 2506, Ap	651	26	54.2	339	11	US-11-188-298-11334	Sequence 11334, A
579	26	54.2	184	11	US-11-087-099-546	Sequence 546, App	652	26	54.2	340	11	US-11-096-568A-23344	Sequence 23344, A
580	26	54.2	184	11	US-11-087-099-4714	Sequence 4714, Ap	653	26	54.2	348	11	US-11-096-568A-8859	Sequence 8859, Ap
581	26	54.2	184	11	US-11-087-099-8982	Sequence 8982, Ap	654	26	54.2	352	11	US-11-188-298-15052	Sequence 15052, A
582	26	54.2	184	11	US-11-087-099-10576	Sequence 10576, A	655	26	54.2	354	9	US-10-878-556A-84	Sequence 84, App1
583	26	54.2	186	11	US-11-087-099-4741	Sequence 4741, Ap	656	26	54.2	354	11	US-11-100-640-4	Sequence 4, App1
584	26	54.2	186	11	US-11-087-099-11303	Sequence 11303, A	657	26	54.2	359	11	US-11-087-099-6685	Sequence 6685, Ap
585	26	54.2	188	11	US-11-087-099-597	Sequence 597, App	658	26	54.2	359	11	US-11-087-099-12228	Sequence 12228, A
586	26	54.2	189	9	US-10-194-487-126	Sequence 126, App	659	26	54.2	360	11	US-11-087-099-1697	Sequence 1697, Ap
587	26	54.2	189	9	US-10-195-883-126	Sequence 126, App	660	26	54.2	361	11	US-11-188-298-7613	Sequence 7613, Ap
588	26	54.2	189	9	US-10-195-888-126	Sequence 126, App	661	26	54.2	378	11	US-11-172-740-1335	Sequence 1335, Ap
589	26	54.2	189	9	US-10-195-889-126	Sequence 126, App	662	26	54.2	378	11	US-11-188-298-2099	Sequence 2099, Ap
590	26	54.2	191	9	US-10-644-807-422	Sequence 422, App	663	26	54.2	379	11	US-11-188-298-11251	Sequence 11251, A
591	26	54.2	194	11	US-11-087-099-3754	Sequence 3754, Ap	664	26	54.2	380	10	US-11-302-678-20	Sequence 20, App1
592	26	54.2	194	11	US-11-087-099-8262	Sequence 8262, Ap	665	26	54.2	381	11	US-11-096-568A-23343	Sequence 23343, A
593	26	54.2	202	11	US-11-087-099-7436	Sequence 7436, Ap	666	26	54.2	383	9	US-10-467-657-4118	Sequence 4118, Ap
594	26	54.2	206	9	US-10-873-528-145	Sequence 145, App	667	26	54.2	385	11	US-11-087-099-7231	Sequence 7231, Ap
595	26	54.2	216	11	US-11-087-099-11570	Sequence 11570, A	668	26	54.2	388	11	US-11-188-298-16939	Sequence 16939, A
596	26	54.2	216	11	US-11-188-298-19358	Sequence 19358, A	669	26	54.2	388	11	US-11-087-099-38322	Sequence 3832, Ap
597	26	54.2	223	11	US-11-096-568A-24914	Sequence 24914, A	670	26	54.2	388	11	US-11-188-298-3583	Sequence 3583, Ap
598	26	54.2	228	11	US-11-188-298-7542	Sequence 7542, Ap	671	26	54.2	394	11	US-11-188-298-5825	Sequence 5825, Ap
599	26	54.2	236	9	US-10-467-657-676	Sequence 676, App	672	26	54.2	400	11	US-11-127-877-55	Sequence 55, App1
600	26	54.2	254	9	US-10-506-454-887	Sequence 887, App	673	26	54.2	400	11	US-11-188-298-22104	Sequence 22104, A
601	26	54.2	255	9	US-10-467-657-1846	Sequence 1846, Ap	674	26	54.2	404	11	US-11-096-568A-2549	Sequence 2549, Ap
602	26	54.2	257	11	US-11-188-298-18028	Sequence 18028, A	675	26	54.2	404	11	US-11-096-568A-11354	Sequence 11354, A
603	26	54.2	258	9	US-10-204-639-5	Sequence 5, App1	676	26	54.2	409	11	US-11-096-568A-2511	Sequence 2511, Ap
604	26	54.2	261	11	US-11-096-568A-8861	Sequence 8861, Ap	677	26	54.2	412	11	US-11-072-512-3475	Sequence 3475, Ap
605	26	54.2	264	9	US-10-467-657-6940	Sequence 6940, Ap	678	26	54.2	412	11	US-11-072-512-3475	Sequence 3475, Ap

679	26	54.2	415	9	US-10-467-657-7774	Sequence 7774, Ap	752	26	54.2	831	11	US-11-096-568A-1542	Sequence 1542, Ap
680	26	54.2	430	11	US-11-096-568A-11353	Sequence 11353, A	753	26	54.2	854	9	US-10-511-657-4	Sequence 4, Appl1
681	26	54.2	444	11	US-11-096-568A-2510	Sequence 2510, Ap	754	26	54.2	871	11	US-11-168-298-10888	Sequence 10888, A
682	26	54.2	450	11	US-11-087-099-3918	Sequence 3918, Ap	755	26	54.2	890	11	US-11-182-016-34	Sequence 34, Appl
683	26	54.2	450	11	US-11-096-568A-11352	Sequence 11352, A	756	26	54.2	928	11	US-11-072-512-2435	Sequence 2435, Ap
684	26	54.2	451	9	US-10-506-454-1647	Sequence 1647, Ap	757	26	54.2	968	9	US-10-506-454-1177	Sequence 1177, Ap
685	26	54.2	457	8	US-10-505-928-761	Sequence 761, App	758	26	54.2	984	9	US-10-995-561-629	Sequence 629, App
686	26	54.2	457	9	US-10-951-236-1	Sequence 1, Appl1	759	26	54.2	1001	11	US-11-132-885-40	Sequence 40, Appl
687	26	54.2	457	9	US-10-951-236-10	Sequence 10, Appl1	760	26	54.2	1013	9	US-10-131-826A-38	Sequence 38, Appl
688	26	54.2	465	11	US-11-188-298-22504	Sequence 22504, A	761	26	54.2	1013	9	US-10-973-115B-38	Sequence 38, Appl
689	26	54.2	467	9	US-10-514-581-7	Sequence 7, Appl1	762	26	54.2	1013	9	US-10-132-370-38	Sequence 38, Appl
690	26	54.2	467	9	US-10-514-581-11	Sequence 11, Appl1	763	26	54.2	1013	9	US-11-290-153-38	Sequence 38, Appl
691	26	54.2	467	11	US-11-087-099-11202	Sequence 11202, A	764	26	54.2	1013	11	US-11-087-099-3726	Sequence 3726, Ap
692	26	54.2	469	11	US-11-087-099-321	Sequence 321, App	765	26	54.2	1131	11	US-11-043-889-46	Sequence 46, Appl
693	26	54.2	469	11	US-11-087-099-6164	Sequence 6164, Ap	766	26	54.2	1187	11	US-11-096-568A-32822	Sequence 32822, A
694	26	54.2	472	11	US-11-096-568A-12646	Sequence 12646, A	767	26	54.2	1193	11	US-11-096-568A-32521	Sequence 32521, A
695	26	54.2	475	11	US-11-096-568A-2548	Sequence 2548, Ap	768	26	54.2	1237	11	US-11-096-568A-32520	Sequence 32520, A
696	26	54.2	475	11	US-11-096-568A-34092	Sequence 34092, A	769	26	54.2	1266	11	US-11-058-134A-102	Sequence 102, App
697	26	54.2	482	11	US-11-188-298-5046	Sequence 5046, Ap	770	26	54.2	1676	11	US-11-180-074-4	Sequence 4, Appl1
698	26	54.2	483	9	US-10-934-944-156	Sequence 156, App	771	26	54.2	1854	11	US-11-193-561-25	Sequence 25, Appl
699	26	54.2	483	9	US-10-514-581-6	Sequence 6, Appl1	772	26	54.2	2176	11	US-11-193-771-25	Sequence 25, Appl
700	26	54.2	483	9	US-10-514-581-9	Sequence 9, Appl1	773	26	54.2	2176	11	US-11-193-789-25	Sequence 25, Appl
701	26	54.2	483	9	US-10-514-581-15	Sequence 15, Appl1	774	26	54.2	2176	11	US-11-193-806-25	Sequence 25, Appl
702	26	54.2	483	11	US-11-116-881A-165	Sequence 165, App	775	26	54.2	2176	11	US-11-193-857-25	Sequence 25, Appl
703	26	54.2	490	11	US-11-096-568A-12645	Sequence 12645, A	776	26	54.2	2217	11	US-11-193-771-38	Sequence 38, Appl
704	26	54.2	501	11	US-11-072-512-3082	Sequence 3082, Ap	777	26	54.2	2217	11	US-11-193-771-38	Sequence 38, Appl
705	26	54.2	506	11	US-11-182-016-32	Sequence 32, Appl	778	26	54.2	2217	11	US-11-193-789-38	Sequence 38, Appl
706	26	54.2	510	11	US-11-087-099-4252	Sequence 4252, Ap	779	26	54.2	2217	11	US-11-193-806-38	Sequence 38, Appl
707	26	54.2	510	11	US-11-188-298-14373	Sequence 14373, A	780	26	54.2	2217	11	US-11-193-806-38	Sequence 38, Appl
708	26	54.2	511	11	US-11-087-099-3587	Sequence 3587, Ap	781	26	54.2	2217	11	US-11-193-857-38	Sequence 38, Appl
709	26	54.2	511	11	US-11-087-099-12361	Sequence 12361, A	782	26	54.2	2223	11	US-11-193-661-2	Sequence 2, Appl1
710	26	54.2	511	11	US-11-188-298-13081	Sequence 13081, A	783	26	54.2	2223	11	US-11-193-771-2	Sequence 2, Appl1
711	26	54.2	511	11	US-11-188-298-21127	Sequence 21127, A	784	26	54.2	2223	11	US-11-193-789-2	Sequence 2, Appl1
712	26	54.2	512	11	US-11-188-298-13770	Sequence 13770, A	785	26	54.2	2223	11	US-11-193-806-2	Sequence 2, Appl1
713	26	54.2	517	11	US-11-087-099-1434	Sequence 1434, Ap	786	26	54.2	2223	11	US-11-193-561-23	Sequence 23, Appl
714	26	54.2	517	11	US-11-116-881A-370	Sequence 370, App	787	26	54.2	2226	9	US-11-193-561-623	Sequence 623, App
715	26	54.2	517	11	US-11-188-298-8213	Sequence 8213, Ap	788	26	54.2	2226	11	US-11-193-771-23	Sequence 23, Appl
716	26	54.2	519	11	US-11-096-568A-29318	Sequence 29318, A	789	26	54.2	2226	11	US-11-193-789-23	Sequence 23, Appl
717	26	54.2	537	11	US-11-096-568A-2509	Sequence 2509, Ap	790	26	54.2	2226	11	US-11-193-806-23	Sequence 23, Appl
718	26	54.2	541	11	US-11-096-568A-29317	Sequence 29317, A	791	26	54.2	2226	11	US-11-193-789-19	Sequence 19, Appl
719	26	54.2	542	11	US-11-087-099-12308	Sequence 12308, A	792	26	54.2	2226	11	US-11-193-857-23	Sequence 23, Appl
720	26	54.2	557	9	US-10-512-109-9	Sequence 9, Appl1	793	26	54.2	2330	11	US-11-193-771-21	Sequence 21, Appl
721	26	54.2	561	11	US-11-087-099-21117	Sequence 21117, Ap	794	26	54.2	2330	11	US-11-193-789-21	Sequence 21, Appl
722	26	54.2	563	11	US-11-096-568A-29316	Sequence 29316, A	795	26	54.2	2330	11	US-11-193-806-21	Sequence 21, Appl
723	26	54.2	567	11	US-11-120-422-7	Sequence 7, Appl1	796	26	54.2	2330	11	US-11-193-806-21	Sequence 21, Appl
724	26	54.2	568	11	US-11-226-480-10	Sequence 10, Appl	797	26	54.2	2330	11	US-11-193-857-21	Sequence 21, Appl
725	26	54.2	568	11	US-11-228-079-10	Sequence 10, Appl	798	26	54.2	2335	9	US-10-995-561-623	Sequence 623, App
726	26	54.2	570	11	US-11-096-568A-29686	Sequence 29686, A	799	26	54.2	2335	9	US-10-995-561-627	Sequence 627, App
727	26	54.2	599	11	US-11-098-686-11232	Sequence 11232, A	800	26	54.2	2335	11	US-11-193-561-19	Sequence 19, Appl
728	26	54.2	603	9	US-10-514-581-8	Sequence 8, Appl1	801	26	54.2	2335	11	US-11-193-771-15	Sequence 15, Appl
729	26	54.2	603	9	US-10-514-581-13	Sequence 13, Appl	802	26	54.2	2335	11	US-11-193-789-19	Sequence 19, Appl
730	26	54.2	626	11	US-11-045-004-447	Sequence 447, App	803	26	54.2	2335	11	US-11-193-806-19	Sequence 19, Appl
731	26	54.2	638	11	US-11-188-298-15845	Sequence 15845, A	804	26	54.2	2335	11	US-11-193-857-15	Sequence 15, Appl
732	26	54.2	642	9	US-10-995-561-631	Sequence 631, App	805	26	54.2	2384	9	US-10-821-234-1545	Sequence 1545, Ap
733	26	54.2	657	9	US-10-995-561-622	Sequence 622, App	806	26	54.2	2386	9	US-10-995-561-626	Sequence 626, App
734	26	54.2	657	11	US-11-193-561-627	Sequence 27, Appl	807	26	54.2	2421	11	US-11-193-561-17	Sequence 17, Appl
735	26	54.2	657	11	US-11-193-771-27	Sequence 27, Appl	808	26	54.2	2421	11	US-11-193-771-17	Sequence 17, Appl
736	26	54.2	657	11	US-11-193-789-27	Sequence 27, Appl	809	26	54.2	2421	11	US-11-193-789-17	Sequence 17, Appl
737	26	54.2	657	11	US-11-193-806-27	Sequence 27, Appl	810	26	54.2	2421	11	US-11-193-806-17	Sequence 17, Appl
738	26	54.2	657	11	US-11-193-857-27	Sequence 27, Appl	811	26	54.2	2421	11	US-11-193-857-17	Sequence 17, Appl
739	26	54.2	657	11	US-11-193-857-27	Sequence 27, Appl	812	26	54.2	2421	11	US-11-193-857-15	Sequence 15, Appl
740	26	54.2	659	11	US-11-188-298-2965	Sequence 2965, Ap	813	26	54.2	2421	11	US-11-193-857-15	Sequence 15, Appl
741	26	54.2	695	11	US-11-096-568A-29685	Sequence 29685, A	814	26	54.2	2421	11	US-11-193-789-15	Sequence 15, Appl
742	26	54.2	750	11	US-11-132-285-2	Sequence 2, Appl1	815	26	54.2	2421	11	US-11-193-806-15	Sequence 15, Appl
743	26	54.2	752	11	US-11-096-568A-29684	Sequence 29684, A	816	26	54.2	2421	11	US-11-193-857-15	Sequence 15, Appl
744	26	54.2	753	11	US-11-072-512-2512	Sequence 2512, Ap	817	26	54.2	2421	11	US-11-193-857-15	Sequence 15, Appl
745	26	54.2	779	11	US-11-096-568A-1544	Sequence 1544, Ap	818	26	54.2	2871	11	US-11-169-925-3	Sequence 3, Appl1
746	26	54.2	784	9	US-10-467-657-5968	Sequence 5968, Ap	819	26	54.2	3002	9	US-10-821-234-916	Sequence 916, App
747	26	54.2	784	11	US-11-096-568A-1543	Sequence 1543, Ap	820	26	54.2	3803	9	US-10-995-561-773	Sequence 773, App
748	26	54.2	791	9	US-10-537-002-65	Sequence 65, Appl	821	26	54.2	3960	9	US-10-501-035-771	Sequence 771, App
749	26	54.2	802	11	US-11-079-463-7102	Sequence 7102, Ap	822	26	54.2	4128	9	US-10-501-035-263	Sequence 263, App
750	26	54.2	815	11	US-11-188-298-16557	Sequence 16557, A	823	26	54.2	4128	9	US-10-770-726-77	Sequence 77, Appl
751	26	54.2	821	9	US-10-523-328-17	Sequence 17, Appl	824	26	54.2	5335	9	US-10-995-561-777	Sequence 777, App

825	26	54.2	5405	11	US-11-108-172-1116	Sequence 1116, Ap	898	25	52.1	207	11	US-11-096-568A-24851	Sequence 24851, A
826	26	54.2	5406	9	US-10-995-561-774	Sequence 774, App	899	25	52.1	209	9	US-10-644-807-402	Sequence 402, App
827	26	54.2	5415	9	US-10-995-561-779	Sequence 779, App	900	25	52.1	215	11	US-11-096-568A-19262	Sequence 19262, A
828	26	54.2	5464	9	US-10-995-561-775	Sequence 775, App	901	25	52.1	216	11	US-11-079-463-7603	Sequence 7603, App
829	25.5	53.1	31	9	US-10-467-657-9001	Sequence 9001, Ap	902	25	52.1	220	11	US-11-188-298-9254	Sequence 9254, App
830	25.5	53.1	766	9	US-10-821-234-1991	Sequence 1691, Ap	903	25	52.1	227	11	US-11-098-686-11198	Sequence 11198, A
831	25	53.1	9	9	US-10-530-061-88	Sequence 88, Appl	904	25	52.1	228	9	US-10-467-657-7522	Sequence 7522, Ap
832	25	53.1	9	9	US-10-530-061-816	Sequence 816, App	905	25	52.1	229	11	US-11-188-298-13055	Sequence 13055, A
833	25	53.1	10	9	US-10-530-061-550	Sequence 550, App	906	25	52.1	230	11	US-11-165-963-2	Sequence 2, Appl1
834	25	53.1	11	9	US-10-530-061-491	Sequence 491, App	907	25	52.1	231	11	US-11-087-099-10346	Sequence 10346, A
835	25	53.1	15	9	US-10-530-061-1686	Sequence 1686, Ap	908	25	52.1	233	11	US-11-096-568A-16039	Sequence 16039, A
836	25	53.1	15	9	US-10-530-061-1706	Sequence 1706, Ap	909	25	52.1	234	9	US-10-485-517-201	Sequence 201, App
837	25	53.1	17	9	US-11-485-517-217	Sequence 217, App	910	25	52.1	234	11	US-11-264-096-318	Sequence 318, App
838	25	53.1	18	11	US-11-106-415-274	Sequence 274, App	911	25	52.1	236	11	US-11-096-568A-15774	Sequence 15774, A
839	25	53.1	18	11	US-11-233-256-274	Sequence 274, App	912	25	52.1	237	11	US-11-096-568A-16038	Sequence 16038, A
840	25	53.1	19	9	US-10-939-890-253	Sequence 253, App	913	25	52.1	243	11	US-11-096-568A-2924	Sequence 2925, Ap
841	25	53.1	19	9	US-10-895-064-326	Sequence 326, App	914	25	52.1	244	11	US-11-096-568A-2925	Sequence 16037, A
842	25	53.1	19	11	US-11-055-163-11	Sequence 11, Appl	915	25	52.1	244	11	US-11-096-568A-1346	Sequence 1346, Ap
843	25	53.1	19	11	US-11-129-741-326	Sequence 326, Appl	916	25	52.1	247	9	US-10-506-454-1346	Sequence 440, App
844	25	53.1	19	11	US-11-129-741-3257	Sequence 3257, Ap	917	25	52.1	247	11	US-11-024-959-440	Sequence 31811, A
845	25	53.1	20	11	US-11-023-562-183	Sequence 183, App	918	25	52.1	247	11	US-11-096-568A-31011	Sequence 10101, A
846	25	53.1	20	11	US-11-023-562-184	Sequence 184, App	919	25	52.1	252	11	US-11-098-686-10101	Sequence 620, App
847	25	53.1	20	11	US-11-106-415-104	Sequence 104, App	920	25	52.1	252	11	US-10-455-772-620	Sequence 620, App
848	25	53.1	20	11	US-11-233-256-104	Sequence 104, App	921	25	52.1	256	9	US-11-096-568A-6225	Sequence 13634, A
849	25	53.1	47	11	US-11-000-463-726	Sequence 726, App	922	25	52.1	257	11	US-11-096-568A-13975	Sequence 13975, A
850	25	53.1	59	11	US-11-096-568A-7742	Sequence 7742, Ap	923	25	52.1	257	11	US-11-087-099-4094	Sequence 4094, Ap
851	25	53.1	62	11	US-11-004-399-2220	Sequence 2220, Ap	924	25	52.1	259	11	US-11-079-463-7552	Sequence 5752, A
852	25	53.1	64	11	US-11-079-463-9165	Sequence 9165, Ap	925	25	52.1	261	11	US-11-096-568A-33133	Sequence 33133, A
853	25	53.1	68	11	US-11-079-463-9823	Sequence 9823, Ap	926	25	52.1	262	11	US-11-087-099-9036	Sequence 9036, Ap
854	25	53.1	72	11	US-11-214-613-94	Sequence 94, Appl	927	25	52.1	265	11	US-10-495-597-5	Sequence 5, Appl1
855	25	53.1	88	9	US-10-948-571-61	Sequence 61, Appl	928	25	52.1	267	9	US-11-079-463-8304	Sequence 8304, Ap
856	25	53.1	91	11	US-11-079-463-9567	Sequence 9567, Ap	929	25	52.1	268	11	US-10-821-234-1328	Sequence 1320, Ap
857	25	53.1	99	11	US-11-264-096-1146	Sequence 1146, Ap	930	25	52.1	277	9	US-10-878-5568A-54	Sequence 54, Appl
858	25	53.1	101	9	US-10-467-657-7350	Sequence 7350, Ap	931	25	52.1	277	9	US-11-214-613-2	Sequence 2, Appl1
859	25	53.1	103	11	US-11-096-568A-2029	Sequence 2029, Ap	932	25	52.1	281	11	US-11-087-099-6234	Sequence 6234, Ap
860	25	53.1	103	11	US-11-079-463-5919	Sequence 5919, Ap	933	25	52.1	281	11	US-11-198-298-1670	Sequence 1670, A
861	25	53.1	112	11	US-11-188-298-20201	Sequence 20201, A	934	25	52.1	285	11	US-11-214-613-18	Sequence 18, Appl
862	25	53.1	118	11	US-11-072-512-3738	Sequence 3738, A	935	25	52.1	288	11	US-11-096-568A-8142	Sequence 8142, Ap
863	25	53.1	120	11	US-11-072-512-2185	Sequence 2185, Ap	936	25	52.1	288	11	US-11-070-726-53	Sequence 53, Appl
864	25	53.1	120	11	US-11-096-568A-12352	Sequence 12352, A	937	25	52.1	292	9	US-11-096-568A-2922	Sequence 2922, Ap
865	25	53.1	121	11	US-11-188-298-17706	Sequence 17706, A	938	25	52.1	292	11	US-11-079-463-5284	Sequence 5284, Ap
866	25	53.1	132	11	US-11-188-298-19945	Sequence 19945, A	939	25	52.1	294	11	US-11-214-613-26	Sequence 26, Appl
867	25	53.1	135	11	US-11-096-568A-5601	Sequence 5601, Ap	940	25	52.1	294	11	US-11-087-099-3038	Sequence 3038, Ap
868	25	53.1	140	9	US-10-644-807-306	Sequence 306, App	941	25	52.1	299	11	US-11-074-613-39	Sequence 8704, Ap
869	25	53.1	142	11	US-11-096-568A-2028	Sequence 2028, Ap	942	25	52.1	299	11	US-11-074-613-117	Sequence 117, Ap
870	25	53.1	142	11	US-11-045-004-1070	Sequence 1070, Ap	943	25	52.1	299	11	US-11-172-740-1117	Sequence 1117, Ap
871	25	53.1	148	9	US-10-530-253-22	Sequence 22, Appl	944	25	52.1	299	11	US-11-154-293-24	Sequence 24, Appl
872	25	53.1	149	11	US-11-096-568A-12138	Sequence 12138, A	945	25	52.1	299	11	US-11-214-613-42	Sequence 42, Appl
873	25	53.1	151	11	US-11-022-562-215	Sequence 215, App	946	25	52.1	299	11	US-11-214-613-22	Sequence 22, Appl
874	25	53.1	151	11	US-11-188-298-21782	Sequence 21782, A	947	25	52.1	301	11	US-11-096-568A-8543	Sequence 8543, Ap
875	25	53.1	151	11	US-10-330-773-819	Sequence 819, App	948	25	52.1	301	11	US-11-096-568A-1434	Sequence 1434, Ap
876	25	53.1	159	9	US-10-188-298-2842	Sequence 2842, Ap	949	25	52.1	305	11	US-11-045-004-10571	Sequence 10571, A
877	25	53.1	160	11	US-10-511-130-24	Sequence 24, Appl	950	25	52.1	306	11	US-11-098-686-10571	Sequence 215, App
878	25	53.1	161	11	US-11-087-099-5561	Sequence 5561, Ap	951	25	52.1	308	11	US-11-018-018-5	Sequence 5, Appl1
879	25	53.1	161	11	US-11-079-463-7422	Sequence 7422, Ap	952	25	52.1	308	11	US-11-047-757-5	Sequence 5, Appl1
880	25	53.1	163	11	US-11-188-298-1891	Sequence 1891, Ap	953	25	52.1	310	11	US-11-055-163-7	Sequence 7, Appl1
881	25	53.1	168	11	US-11-096-568A-12351	Sequence 12351, A	954	25	52.1	310	11	US-11-096-568A-16039	Sequence 16039, A
882	25	53.1	173	11	US-11-087-099-5501	Sequence 5501, Ap	955	25	52.1	310	11	US-11-166-892-23	Sequence 23, Appl
883	25	53.1	174	11	US-11-072-512-2771	Sequence 2771, Ap	956	25	52.1	310	11	US-11-048-490-5	Sequence 5, Appl1
884	25	53.1	174	11	US-11-264-096-316	Sequence 316, Ap	957	25	52.1	310	11	US-11-077-664-5	Sequence 5, Appl1
885	25	53.1	176	11	US-11-188-298-20217	Sequence 20217, A	958	25	52.1	310	11	US-11-154-293-22	Sequence 22, Appl
886	25	53.1	181	11	US-11-087-099-9675	Sequence 9675, Ap	959	25	52.1	310	11	US-11-214-613-30	Sequence 30, Appl
887	25	53.1	181	11	US-11-096-568A-5600	Sequence 5600, Ap	960	25	52.1	311	11	US-11-096-568A-16037	Sequence 16037, A
888	25	53.1	181	11	US-11-096-568A-8544	Sequence 8544, Ap	961	25	52.1	311	11	US-11-096-568A-16037	Sequence 16037, A
889	25	53.1	181	11	US-11-096-568A-12137	Sequence 12137, A	962	25	52.1	311	11	US-11-096-568A-16037	Sequence 16037, A
890	25	53.1	187	11	US-11-096-568A-32157	Sequence 32157, A	963	25	52.1	311	11	US-11-096-568A-16037	Sequence 16037, A
891	25	53.1	190	11	US-11-182-016-41	Sequence 41, Appl	964	25	52.1	311	11	US-11-096-568A-16037	Sequence 16037, A
892	25	53.1	192	9	US-10-644-807-403	Sequence 403, App	965	25	52.1	312	9	US-10-495-597-6	Sequence 6, Appl1
893	25	53.1	194	9	US-10-467-657-3978	Sequence 3978, Ap	966	25	52.1	312	9	US-10-495-597-6	Sequence 6, Appl1
894	25	53.1	201	11	US-11-123-873-7	Sequence 7, Appl1	967	25	52.1	313	11	US-10-455-772-618	Sequence 618, App
895	25	53.1	204	11	US-11-079-463-10366	Sequence 10366, A	968	25	52.1	314	9	US-10-455-772-618	Sequence 618, App
896	25	53.1	205	11	US-11-087-099-1175	Sequence 1175, Ap	969	25	52.1	314	9	US-10-455-772-622	Sequence 622, App
897	25	53.1	205	11	US-11-188-298-1206	Sequence 1206, Ap	970	25	52.1	314	9	US-10-455-772-622	Sequence 622, App

971 25 52.1 314 9 US-10-455-772-624 Sequence 624, App
972 25 52.1 314 9 US-10-455-772-626 Sequence 626, App
973 25 52.1 314 9 US-10-455-772-628 Sequence 628, App
974 25 52.1 314 9 US-10-455-772-630 Sequence 630, App
975 25 52.1 314 9 US-10-455-772-632 Sequence 632, App
976 25 52.1 314 9 US-10-455-772-634 Sequence 634, App
977 25 52.1 314 9 US-10-455-772-636 Sequence 636, App
978 25 52.1 314 9 US-10-455-772-638 Sequence 638, App
979 25 52.1 314 9 US-10-455-772-640 Sequence 640, App
980 25 52.1 314 9 US-10-455-772-642 Sequence 642, App
981 25 52.1 314 9 US-10-455-772-644 Sequence 644, App
982 25 52.1 314 9 US-10-455-772-646 Sequence 646, App
983 25 52.1 314 9 US-10-455-772-648 Sequence 648, App
984 25 52.1 314 9 US-10-455-772-650 Sequence 650, App
985 25 52.1 314 9 US-10-455-772-652 Sequence 652, App
986 25 52.1 314 9 US-10-455-772-654 Sequence 654, App
987 25 52.1 314 9 US-10-455-772-656 Sequence 656, App
988 25 52.1 314 9 US-10-455-772-658 Sequence 658, App
989 25 52.1 314 11 US-11-188-298-20494 Sequence 20494, A
990 25 52.1 317 9 US-10-506-454-1068 Sequence 1068, App
991 25 52.1 317 9 US-10-784-004-649 Sequence 649, App
992 25 52.1 317 9 US-10-784-004-1052 Sequence 1052, App
993 25 52.1 317 11 US-11-011-332A-21 Sequence 21, App1
994 25 52.1 318 11 US-11-072-512-3641 Sequence 3641, App
995 25 52.1 320 11 US-11-188-298-17923 Sequence 17923, A
996 25 52.1 322 11 US-11-096-568A-8542 Sequence 8542, App
997 25 52.1 322 11 US-11-188-298-17610 Sequence 17610, A
998 25 52.1 324 9 US-10-506-454-1539 Sequence 1539, App
999 25 52.1 324 9 US-10-784-004-328 Sequence 328, App
1000 25 52.1 324 9 US-10-784-004-911 Sequence 911, App

ALIGNMENTS

RESULT 1
US-10-530-253-13
; Sequence 13, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 13
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-13
Query Match 100.0%; Score 48; DB 9; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.029; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

Qy 1 FAFRDLCTIV 9
Db 45 FAFRDLCTIV 53

RESULT 2
US-11-206-138-3
; Sequence 3, Application US/11206138
; Publication No. US20060039919A1

; GENERAL INFORMATION:
; APPLICANT: Healthbanc Biotech CO. LTD.
; TITLE OF INVENTION: Fusion protein for inhibiting cervical cancer
; FILE REFERENCE: P819/0613
; CURRENT APPLICATION NUMBER: US/11/206,138
; PRIOR FILING DATE: 2005-08-18
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 3
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-11-206-138-3
Query Match 100.0%; Score 48; DB 11; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.031; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

Qy 1 FAFRDLCTIV 9
Db 52 FAFRDLCTIV 60

RESULT 3
US-10-530-253-1
; Sequence 1, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-1
Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.047; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

Qy 1 FAFRDLCTIV 9
Db 45 FAFRDLCTIV 53

RESULT 4
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929

;; PRIOR FILING DATE: 2002-10-03
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO: 3
;; LENGTH: 248
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 45 FAFRDLCTIV 53

RESULT 5
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 45 FAFRDLCTIV 53

RESULT 6
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 7
; LENGTH: 248

;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-10-530-253-7

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 142 FAFRDLCTIV 150

RESULT 7
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCTIV 9
Db 142 FAFRDLCTIV 150

RESULT 8
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11

Query Match 100.0%; Score 48; DB 9; Length 248;

Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
|||
Db 142 FAFRDLCIV 150

RESULT 9
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PAN, XIAOMU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
; CURRENT APPLICATION NUMBER: US/11/192,923A
; PRIOR FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match 100.0%; Score 48; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.048;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
|||
Db 150 FAFRDLCIV 158

RESULT 10
US-10-530-253-20
; Sequence 20, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 20
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 45
US-10-530-253-20

Query Match 93.8%; Score 45; DB 9; Length 158;
Best Local Similarity 88.9%; Pred. No. 0.12;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCIV 9
|||
Db 47 FAFRDLCIV 55

RESULT 11
US-10-530-061-780
; Sequence 780, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 780
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-780

Query Match 91.7%; Score 44; DB 9; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FAFRDLCI 8
|||
Db 4 FAFRDLCI 11

RESULT 12
US-10-530-061-800
; Sequence 800, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 800
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-800

Query Match 87.5%; Score 42; DB 9; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.9e+05;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFRDLCIV 9
|||
Db 1 AFRDLCIV 8

RESULT 13
US-10-530-061-500

```
; Sequence 500, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 500
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-500
```

```
Query Match      87.5%; Score 42; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.034;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 2 AFRDLCTV 9
Db 1 AFRDLCTV 8
```

```
RESULT 14
US-10-530-061-784
; Sequence 784, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 784
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-784
```

```
Query Match      85.4%; Score 41; DB 9; Length 11;
Best Local Similarity 87.5%; Pred. No. 0.058;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 PAFRDLCTI 8
Db 4 PAFRDLCTI 11
```

```
RESULT 15
US-10-530-253-26
; Sequence 26, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Casatelli, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 26
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 68
US-10-530-253-26
```

```
Query Match      85.4%; Score 41; DB 9; Length 158;
Best Local Similarity 77.8%; Pred. No. 0.69;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 PAFRDLCTV 9
Db 47 PAFRDLCTV 55
```

```
RESULT 16
US-10-530-061-77
; Sequence 77, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 77
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-77
```

```
Query Match      81.2%; Score 39; DB 9; Length 9;
Best Local Similarity 87.5%; Pred. No. 1.9e+05;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 2 AFRDLCTV 9
Db 1 AFRDLCTV 8
```

```
RESULT 17
US-10-530-061-799
; Sequence 799, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
```

FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530.061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 799
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-799

Query Match 81.2%; Score 39; DB 9; Length 9;
Best Local Similarity 87.5%; Pred. No. 1.9e+05;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFRLDCLV 9
|:|||||
Db 1 AFRLDCLV 8

RESULT 18
US-10-530-061-821
; Sequence 821, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530.061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 821
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-821

Query Match 81.2%; Score 39; DB 9; Length 9;
Best Local Similarity 87.5%; Pred. No. 1.9e+05;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFRLDCLV 9
|:|||||
Db 1 AFRLDCLV 8

RESULT 19
US-10-530-061-566
; Sequence 566, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530.061
; CURRENT FILING DATE: 2005-04-04

; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 566
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-566

Query Match 81.2%; Score 39; DB 9; Length 10;
Best Local Similarity 87.5%; Pred. No. 0.13;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFRLDCLV 9
|:|||||
Db 1 AFRLDCLV 8

RESULT 20
US-11-229-769-160
; Sequence 160, Application US/11229769
; Publication No. US20060079670A1
; GENERAL INFORMATION:
; APPLICANT: Komatsoulis et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P1D1C1
; CURRENT APPLICATION NUMBER: US/11/229,769
; CURRENT FILING DATE: 2005-09-20
; PRIOR APPLICATION NUMBER: 10/233,453
; PRIOR FILING DATE: 2002-09-04
; PRIOR APPLICATION NUMBER: 09/489,847
; PRIOR FILING DATE: 2000-01-24
; PRIOR APPLICATION NUMBER: PCT/US99/17130
; PRIOR FILING DATE: 1999-07-29
; PRIOR APPLICATION NUMBER: 60/094,657
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: 60/095,486
; PRIOR FILING DATE: 1998-08-05
; PRIOR APPLICATION NUMBER: 60/096,319
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: 60/095,454
; PRIOR FILING DATE: 1998-08-06
; PRIOR APPLICATION NUMBER: 60/095,455
; PRIOR FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 160
; LENGTH: 162
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (162)
; OTHER INFORMATION: Xaa equals stop translation
US-11-229-769-160

Query Match 77.1%; Score 37; DB 11; Length 162;
Best Local Similarity 66.7%; Pred. No. 4.2;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 AFRLDCLV 9
|:|||||
Db 30 AFRLDCLV 38

RESULT 21
US-11-229-769-320
; Sequence 320, Application US/11229769

```
; Publication No. US20060079670A1
; GENERAL INFORMATION:
; APPLICANT: Komatsubashi et al
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031PDI1
; CURRENT APPLICATION NUMBER: US/11/229,769
; CURRENT FILING DATE: 2005-09-20
; PRIOR APPLICATION NUMBER: 10/233,453
; PRIOR FILING DATE: 2002-09-04
; PRIOR APPLICATION NUMBER: 09/489,847
; PRIOR FILING DATE: 2000-01-24
; PRIOR APPLICATION NUMBER: PCT/US99/17130
; PRIOR FILING DATE: 1999-07-29
; PRIOR APPLICATION NUMBER: 60/094,657
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: 60/095,486
; PRIOR FILING DATE: 1998-08-05
; PRIOR APPLICATION NUMBER: 60/096,319
; PRIOR FILING DATE: 1998-08-12
; PRIOR APPLICATION NUMBER: 60/095,454
; PRIOR FILING DATE: 1998-08-06
; PRIOR APPLICATION NUMBER: 60/095,455
; PRIOR FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 320
; LENGTH: 207
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-229-769-320

Query Match          77.1%; Score 37; DB 11; Length 207;
Best Local Similarity 66.7%; Pred. No. 5.3;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 76 FAFARLCTV 84

RESULT 22
US-10-216-161A-7
; Sequence 7, Application US/10216161A
; Publication No. US20060078964A1
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerltisen, Mary B.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavlin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James;
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
```

```
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630P1C91
; CURRENT APPLICATION NUMBER: US/10/216,161A
; CURRENT FILING DATE: 2002-11-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: PCT/US00/04341
; PRIOR FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/US99/05028
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: US 09/380,138
; PRIOR FILING DATE: 1999-08-25
; PRIOR APPLICATION NUMBER: 60/126,773
; PRIOR FILING DATE: 1999-03-29
; PRIOR APPLICATION NUMBER: 60/081,955
; PRIOR FILING DATE: 1998-04-15
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 7
; LENGTH: 492
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-216-161A-7

Query Match          77.1%; Score 37; DB 9; Length 492;
Best Local Similarity 66.7%; Pred. No. 12;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
Db 361 FAFARLCTV 369

RESULT 23
US-10-530-061-91
; Sequence 91, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 91
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-91

Query Match          75.0%; Score 36; DB 9; Length 9;
Best Local Similarity 75.0%; Pred. No. 1.9e+05;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 AFRDLCTV 9
Db 1 AYKDLCTV 8

RESULT 24
US-10-530-061-820
; Sequence 820, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
```

```

; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 834
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-820
```

```

Query Match          75.0%; Score 36; DB 9; Length 9;
Best Local Similarity 75.0%; Pred. No. 1.9e+05;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2 AFPRDLCTV 9
Db 1 AYKDLCTV 8
```

RESULT 25

```

US-11-096-568A-8334
; Sequence 8334, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT FILING DATE: 2005-04-01
; CURRENT APPLICATION NUMBER: US/11/096,568A
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 8334
; LENGTH: 50
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(50)
; OTHER INFORMATION: Ceres Seq. ID no. 15224970
US-11-096-568A-8334
```

```

Query Match          72.9%; Score 35; DB 11; Length 50;
Best Local Similarity 66.7%; Pred. No. 3.5;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 1 FAFRDLCTV 9
Db 28 FCFRSLCTL 36
```

RESULT 26

```

US-11-096-568A-32628
; Sequence 32628, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT FILING DATE: 2005-04-01
; CURRENT APPLICATION NUMBER: US/11/096,568A
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 32628
```

```

; LENGTH: 377
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(377)
; OTHER INFORMATION: Ceres Seq. ID no. 13593695
US-11-096-568A-32628
```

```

Query Match          72.9%; Score 35; DB 11; Length 377;
Best Local Similarity 62.5%; Pred. No. 23;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy 1 FAFRDLCT 8
Db 61 FTFRELCTV 68
```

RESULT 27

```

US-11-096-568A-32627
; Sequence 32627, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT FILING DATE: 2005-04-01
; CURRENT APPLICATION NUMBER: US/11/096,568A
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 32627
; LENGTH: 386
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(386)
; OTHER INFORMATION: Ceres Seq. ID no. 13593694
US-11-096-568A-32627
```

```

Query Match          72.9%; Score 35; DB 11; Length 386;
Best Local Similarity 62.5%; Pred. No. 23;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy 1 FAFRDLCT 8
Db 70 FTFRELCTV 77
```

RESULT 28

```

US-10-530-061-499
; Sequence 499, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT FILING DATE: 2005-04-04
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 499
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
```


US-10-530-061-499

Query Match 70.8%; Score 34; DB 9; Length 10;
Best Local Similarity 87.5%; Pred. No. 1.2;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AFRDLCTV 9
Db 1 ATRDLCTV 8

RESULT 29
US-11-096-568A-15982
; Sequence 15982, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:

; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides

; TITLE OF INVENTION: Theby

; FILE REFERENCE: 2750-1592PUS2

; CURRENT APPLICATION NUMBER: US/11/096,568A

; CURRENT FILING DATE: 2005-04-01

; NUMBER OF SEQ ID NOS: 34471

; SEQ ID NO 15982

; LENGTH: 439

; TYPE: PRT

; ORGANISM: Zea mays subsp. mays

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(439)

; OTHER INFORMATION: Ceres Seq. ID no. 12350006

US-11-096-568A-15982

Query Match 70.8%; Score 34; DB 11; Length 439;
Best Local Similarity 55.6%; Pred. No. 41;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AFRDLCTV 9
Db 375 FGFRNVCLV 383

RESULT 30
US-11-096-568A-17183
; Sequence 17183, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:

; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides

; TITLE OF INVENTION: Theby

; FILE REFERENCE: 2750-1592PUS2

; CURRENT APPLICATION NUMBER: US/11/096,568A

; CURRENT FILING DATE: 2005-04-01

; NUMBER OF SEQ ID NOS: 34471

; SEQ ID NO 17183

; LENGTH: 439

; TYPE: PRT

; ORGANISM: Zea mays subsp. mays

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(439)

; OTHER INFORMATION: Ceres Seq. ID no. 12356350

US-11-096-568A-17183

Query Match 70.8%; Score 34; DB 11; Length 439;
Best Local Similarity 55.6%; Pred. No. 41;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AFRDLCTV 9
Db 375 FGFRNVCLV 383

RESULT 31
US-11-096-568A-15981
; Sequence 15981, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:

; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides

; TITLE OF INVENTION: Theby

; FILE REFERENCE: 2750-1592PUS2

; CURRENT APPLICATION NUMBER: US/11/096,568A

; CURRENT FILING DATE: 2005-04-01

; NUMBER OF SEQ ID NOS: 34471

; SEQ ID NO 15981

; LENGTH: 462

; TYPE: PRT

; ORGANISM: Zea mays subsp. mays

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(462)

; OTHER INFORMATION: Ceres Seq. ID no. 12350005

US-11-096-568A-15981

Query Match 70.8%; Score 34; DB 11; Length 462;
Best Local Similarity 55.6%; Pred. No. 43;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AFRDLCTV 9
Db 398 FGFRNVCLV 406

RESULT 32
US-11-096-568A-17182
; Sequence 17182, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:

; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides

; TITLE OF INVENTION: Theby

; FILE REFERENCE: 2750-1592PUS2

; CURRENT APPLICATION NUMBER: US/11/096,568A

; CURRENT FILING DATE: 2005-04-01

; NUMBER OF SEQ ID NOS: 34471

; SEQ ID NO 17182

; LENGTH: 470

; TYPE: PRT

; ORGANISM: Zea mays subsp. mays

; FEATURE:

; NAME/KEY: misc feature

; LOCATION: (1)..(470)

; OTHER INFORMATION: Ceres Seq. ID no. 12356349

US-11-096-568A-17182

Query Match 70.8%; Score 34; DB 11; Length 470;
Best Local Similarity 55.6%; Pred. No. 43;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AFRDLCTV 9
Db 406 FGFRNVCLV 414

RESULT 33
US-11-096-568A-15980
; Sequence 15980, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:

; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides

; TITLE OF INVENTION: Theby

; FILE REFERENCE: 2750-1592PUS2

; CURRENT APPLICATION NUMBER: US/11/096,568A

; CURRENT FILING DATE: 2005-04-01

US-11-096-568A-15980

```

; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 15980
; LENGTH: 480
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(480)
; OTHER INFORMATION: Ceres Seq. ID no. 12350004
US-11-096-568A-15980

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 480;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FAFRDLCTV 9
Db 416 FGFRNVCLV 424

RESULT 34
US-11-096-568A-17181
; Sequence 17181, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; PRIOR FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 17181
; LENGTH: 505
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(505)
; OTHER INFORMATION: Ceres Seq. ID no. 12356348
US-11-096-568A-17181

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 505;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FAFRDLCTV 9
Db 441 FGFRNVCLV 449

RESULT 35
US-10-530-061-519
; Sequence 519, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 519
; LENGTH: 10
```

```

; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-519

Query Match
Best Local Similarity 68.8%; Score 33; DB 9; Length 10;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FAFRDLCTV 9
Db 1 FAFRDLFFV 9

RESULT 36
US-10-530-061-1660
; Sequence 1660, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1660
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1660

Query Match
Best Local Similarity 68.8%; Score 33; DB 9; Length 15;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 FAFRDLCTV 9
Db 4 FAFRDLFFV 12

RESULT 37
US-10-530-061-1661
; Sequence 1661, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1661
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1661
```

Query Match 68.8%; Score 33; DB 9; Length 15;
Best Local Similarity 66.7%; Pred. No. 2.8;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||:|:|:
Db 2 FAFKDLFV 10

RESULT 38
US-10-530-253-18
; Sequence 18, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 18
; LENGTH: 149
; TYPE: PRT
; ORGANISM: Human papillomavirus type 35
US-10-530-253-18

Query Match 68.8%; Score 33; DB 9; Length 149;
Best Local Similarity 77.8%; Pred. No. 23;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||:|:|:
Db 45 FACYDLCTV 53

RESULT 39
US-10-530-253-15
; Sequence 15, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 15
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 18
US-10-530-253-15

Query Match 68.8%; Score 33; DB 9; Length 158;
Best Local Similarity 66.7%; Pred. No. 25;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||:|:|:
Db 47 FAFKDLFV 55

RESULT 40
US-10-965-694-23
; Sequence 23, Application US/10965694
; Publication No. US20050271644A1
; GENERAL INFORMATION:
; APPLICANT: Oldenburg, Johannes
; APPLICANT: Muller-Reibler, Clemens
; APPLICANT: Fregin, Andreas
; APPLICANT: Roost, Simone
; APPLICANT: Strem, Tim
; TITLE OF INVENTION: VITAMIN K EPOXID RECYCLING POLYPEPTIDE VKORC1, A THERAPEUTIC TARG
; FILE REFERENCE: MBP-025XX
; CURRENT APPLICATION NUMBER: US/10/965,694
; CURRENT FILING DATE: 2004-10-14
; PRIOR APPLICATION NUMBER: US 60/511,041
; PRIOR FILING DATE: 2003-10-14
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 23
; LENGTH: 175
; TYPE: PRT
; ORGANISM: Fugu rubripes
US-10-965-694-23

Query Match 68.8%; Score 33; DB 9; Length 175;
Best Local Similarity 44.4%; Pred. No. 27;
Matches 4; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
|||:|:|:
Db 132 FVUKDLCTV 140

RESULT 41
US-11-098-686-10210
; Sequence 10210, Application US/11098686
; Publication No. US20060024696A1
; GENERAL INFORMATION:
; APPLICANT: Kabut, Vivek and Gebhart, Connie J.
; TITLE OF INVENTION: NUCLEIC ACID AND POLYPEPTIDE SEQUENCES
; FROM LAWSONIA INTRACELLULARIS AND METHODS OF USING
; FILE REFERENCE: 09531-128001
; CURRENT APPLICATION NUMBER: US/11/098,686
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31318
; PRIOR FILING DATE: 2003-10-01
; PRIOR APPLICATION NUMBER: US 60/416,395
; PRIOR FILING DATE: 2002-10-04
; NUMBER OF SEQ ID NOS: 11433
; SOFTWARE: FastSeq for windows Version 4.0
; SEQ ID NO 10210
; LENGTH: 214
; TYPE: PRT
; ORGANISM: Lawsonia intracellularis
US-11-098-686-10210

Query Match 68.8%; Score 33; DB 11; Length 214;
Best Local Similarity 53.3%; Pred. No. 33;
Matches 8; Conservative 1; Mismatches 0; Indels 6; Gaps 1;

QY 1 FAFRDL-----CTV 9
|||:|:|:
Db 107 FAFRDLGINSVECTV 121

RESULT 42
US-10-525-907-44

```
Sequence 44, Application US/10525907
; Publication No. US20060068476A1
; GENERAL INFORMATION:
; APPLICANT: Krogger, Burkhard
; APPLICANT: Zeidler, Oskar
; APPLICANT: Kolprogge, Corinna
; APPLICANT: Schoder, Hartwig
; APPLICANT: Halner, Stefan
; TITLE OF INVENTION: Method for Production by Fermentation of Sulphur-Containing Fine
; FILE REFERENCE: 1311-00005-US
; CURRENT APPLICATION NUMBER: US/10/525,907
; CURRENT FILING DATE: 2005-02-25
; PRIOR APPLICATION NUMBER: PCT/EP 2003/009451
; PRIOR FILING DATE: 2003-08-26
; PRIOR APPLICATION NUMBER: DE 102 39 308.7
; PRIOR FILING DATE: 2002-08-27
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 44
; LENGTH: 288
; TYPE: PRT
; ORGANISM: Rhodobacter
; US-10-525-907-44

Query Match      68.8%; Score 33; DB 9; Length 288;
Best Local Similarity 62.5%; Pred. No. 43;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy      1 AFRDLCT 8
Db      179 FRFDACV 186

RESULT 43
US-11-188-298-20322
; Sequence 20322, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 20322
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Buchnera aphidicola str. Bp (Baizongia pistaciae)
; US-11-188-298-20322

Query Match      68.8%; Score 33; DB 11; Length 295;
Best Local Similarity 83.3%; Pred. No. 44;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      3 FRDLCT 8
Db      195 FRDLCTV 200

RESULT 44
US-11-096-568A-24125
; Sequence 24125, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
```

```
NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 24125
; LENGTH: 364
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(364)
; OTHER INFORMATION: Ceres Seq. ID no. 12419009
; US-11-096-568A-24125

Query Match      68.8%; Score 33; DB 11; Length 364;
Best Local Similarity 71.4%; Pred. No. 53;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy      2 AFRDLCT 8
Db      255 AFRDLCTV 261

RESULT 45
US-11-096-568A-24124
; Sequence 24124, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 24124
; LENGTH: 382
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(382)
; OTHER INFORMATION: Ceres Seq. ID no. 12419008
; US-11-096-568A-24124

Query Match      68.8%; Score 33; DB 11; Length 382;
Best Local Similarity 71.4%; Pred. No. 56;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy      2 AFRDLCT 8
Db      273 AFRDLCTV 279

RESULT 46
US-11-096-568A-24123
; Sequence 24123, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 24123
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(405)
; OTHER INFORMATION: Ceres Seq. ID no. 12419007
; US-11-096-568A-24123
```

Query Match 68.8%; Score 33; DB 11; Length 405;
Best Local Similarity 71.4%; Pred. No. 59;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFRDLCT 8
DB 296 AFRDFCV 302

RESULT 47

US-10-530-061-477
; Sequence 477, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 477
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-477

Query Match 66.7%; Score 32; DB 9; Length 10;
Best Local Similarity 77.8%; Pred. No. 2.9;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
DB 1 FAFRDLTIV 9

RESULT 48

US-10-530-061-565
; Sequence 565, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 565
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-565

Query Match 66.7%; Score 32; DB 9; Length 10;
Best Local Similarity 75.0%; Pred. No. 2.9;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 AFRDLCTV 9
DB 1 AVKDLCTV 8

RESULT 49

US-10-530-061-1668
; Sequence 1668, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1668
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1668

Query Match 66.7%; Score 32; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 4.3;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9
DB 6 FAFRDLTIV 14

RESULT 50

US-10-530-061-1669
; Sequence 1669, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1669
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1669

Query Match 66.7%; Score 32; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 4.3;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 FAFRDLCTV 9

Db 4 PAFDPTIV 12

Search completed: May 5, 2006, 08:40:42
Job time : 9.4 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 02:25:57 ; Search time 20.7 Seconds
(without alignments)
35.946 Million cell updates/sec

Title: US-08-170-344-11

Perfect score: 54
Sequence: 1 KISEYRHYC 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/1aa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/6_COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/H_COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/PCTUS_COMB.pep:*
5: /cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
6: /cgn2_6/ptodata/1/1aa/backfilest1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	54	100.0	20	1	US-08-934-915-44
2	54	100.0	20	1	US-08-934-915-163
3	54	100.0	158	2	US-09-980-523A-2
4	54	100.0	162	1	US-08-316-239B-3
5	54	100.0	162	1	US-08-316-239B-4
6	54	100.0	172	2	US-08-860-165-12
7	54	100.0	172	2	US-08-860-165-14
8	54	100.0	172	2	US-09-359-382-12
9	54	100.0	172	2	US-09-359-382-14
10	54	100.0	243	2	US-09-462-993-1
11	54	100.0	266	2	US-08-860-165-10
12	54	100.0	266	2	US-09-359-382-10
13	54	100.0	266	2	US-09-367-309A-1
14	54	100.0	273	2	US-09-485-885-4
15	54	100.0	292	2	US-09-485-885-10
16	54	100.0	371	2	US-09-485-885-6
17	54	100.0	390	2	US-09-485-885-14
18	49	90.7	9	2	US-08-159-339A-76
19	49	90.7	9	2	US-09-601-729-277
20	49	90.7	29	2	US-09-980-523A-8
21	49	90.7	151	2	US-09-701-080C-18
22	49	90.7	182	1	US-08-117-083-10
23	45	83.3	9	2	US-08-159-339A-234
24	45	83.3	10	2	US-08-159-339A-75
25	41	75.9	370	2	US-09-454-071-6
26	40	74.1	9	2	US-08-159-339A-134
27	38	70.4	28	2	US-09-149-476-640

28	37	68.5	124	2	US-09-270-767-33888
29	36	66.7	169	2	US-09-489-039A-13995
30	36	66.7	238	2	US-09-134-000C-3467
31	36	66.7	478	2	US-09-328-352-7708
32	36	66.7	1064	2	US-09-926-820-1
33	36	66.7	2254	1	US-08-286-819A-28
34	36	66.7	2254	2	US-08-980-357-28
35	36	66.7	2254	2	US-09-357-375-28
36	35	64.8	14	2	US-09-051-624A-3
37	35	64.8	14	2	US-09-857-815B-58
38	35	64.8	39	2	US-09-857-815B-60
39	35	64.8	45	2	US-08-899-437-11
40	35	64.8	45	2	US-09-126-121-11
41	35	64.8	46	2	US-08-915-096A-12
42	35	64.8	46	2	US-09-553-769-10
43	35	64.8	46	2	US-09-857-815B-4
44	35	64.8	47	2	US-09-857-815B-3
45	35	64.8	47	2	US-09-857-815B-12
46	35	64.8	48	1	US-08-465-794-3
47	35	64.8	48	2	US-09-049-813-3
48	35	64.8	48	2	US-09-857-815B-11
49	35	64.8	48	2	US-09-857-815B-14
50	35	64.8	48	2	US-09-857-815B-45
51	35	64.8	49	2	US-09-097-681-15
52	35	64.8	49	2	US-09-857-815B-10
53	35	64.8	49	2	US-09-857-815B-13
54	35	64.8	53	2	US-09-857-815B-38
55	35	64.8	53	2	US-09-857-815B-44
56	35	64.8	53	2	US-09-857-815B-63
57	35	64.8	60	1	US-08-465-794-14
58	35	64.8	60	2	US-09-049-813-14
59	35	64.8	75	2	US-09-857-815B-37
60	35	64.8	75	2	US-09-857-815B-61
61	35	64.8	76	2	US-09-857-815B-2
62	35	64.8	77	2	US-09-857-815B-7
63	35	64.8	78	2	US-09-857-815B-6
64	35	64.8	78	2	US-09-857-815B-9
65	35	64.8	78	2	US-09-857-815B-5
66	35	64.8	79	2	US-09-857-815B-8
67	35	64.8	79	2	US-09-857-815B-5
68	35	64.8	80	2	US-08-663-191A-3
69	35	64.8	80	2	US-08-663-191A-3
70	35	64.8	80	2	US-09-051-624A-2
71	35	64.8	80	2	US-09-051-624A-2
72	35	64.8	80	2	US-09-554-119A-2
73	35	64.8	80	2	US-10-138-158-1
74	35	64.8	83	2	US-09-857-815B-35
75	35	64.8	83	2	US-09-857-815B-46
76	35	64.8	129	2	US-08-468-846-12
77	35	64.8	177	1	US-08-465-794-17
78	35	64.8	177	2	US-09-049-813-17
79	35	64.8	177	2	US-09-227-853A-13
80	35	64.8	178	1	US-08-465-794-18
81	35	64.8	178	2	US-09-049-813-18
82	35	64.8	178	2	US-08-663-191A-4
83	35	64.8	261	2	US-09-543-681A-4849
84	35	64.8	265	2	US-09-270-767-42885
85	35	64.8	368	2	US-09-000-094-20
86	35	64.8	368	2	US-10-011-749-20
87	35	64.8	375	2	US-09-000-094-22
88	35	64.8	375	2	US-10-011-749-22
89	35	64.8	465	2	US-09-000-094-24
90	35	64.8	465	2	US-10-011-749-24
91	35	64.8	686	2	US-09-324-024-31
92	35	64.8	686	4	PCT-US94-079902-31
93	35	64.8	1587	2	US-09-000-094-46
94	35	64.8	1587	2	US-10-011-749-46
95	34	63.0	75	2	US-09-270-767-36800
96	34	63.0	75	2	US-09-270-767-52117
97	34	63.0	168	2	US-09-107-533A-4480
98	34	63.0	236	1	US-08-307-499-28
99	34	63.0	236	2	US-09-299-268-28
100	34	63.0	358	2	US-09-270-767-42856

Sequence 33888, A
Sequence 13995, A
Sequence 3467, Ap
Sequence 7708, Ap
Sequence 1, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 3, Appl
Sequence 58, Appl
Sequence 60, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 10, Appl
Sequence 12, Appl
Sequence 4, Appl
Sequence 3, Appl
Sequence 3, Appl
Sequence 11, Appl
Sequence 14, Appl
Sequence 45, Appl
Sequence 15, Appl
Sequence 10, Appl
Sequence 13, Appl
Sequence 38, Appl
Sequence 14, Appl
Sequence 63, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 37, Appl
Sequence 61, Appl
Sequence 2, Appl
Sequence 1, Appl
Sequence 6, Appl
Sequence 9, Appl
Sequence 8, Appl
Sequence 1, Appl
Sequence 1, Appl
Sequence 2, Appl
Sequence 17, Appl
Sequence 35, Appl
Sequence 46, Appl
Sequence 12, Appl
Sequence 17, Appl
Sequence 13, Appl
Sequence 18, Appl
Sequence 4, Appl
Sequence 4849, Ap
Sequence 42985, A
Sequence 20, Appl
Sequence 20, Appl
Sequence 22, Appl
Sequence 22, Appl
Sequence 24, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 46, Appl
Sequence 36900, A
Sequence 52117, A
Sequence 4480, Ap
Sequence 28, Appl
Sequence 28, Appl
Sequence 42856, A

101	63.0	420	2	US-10-070-634-12	Sequence 12, Appl	174	32	59.3	816	2	US-09-273-565-37	Sequence 37, Appl
102	63.0	439	2	US-09-328-352-4576	Sequence 4576, Ap	175	32	59.3	816	2	US-09-565-538-17	Sequence 37, Appl
103	63.0	463	1	US-08-142-439A-2	Sequence 2, Appl1	176	32	59.3	816	2	US-09-661-468-17	Sequence 37, Appl
104	63.0	463	1	US-08-869-477-2	Sequence 2, Appl1	177	32	59.3	816	2	US-09-976-165-37	Sequence 37, Appl
105	63.0	544	2	US-09-248-796A-18606	Sequence 18606, A	178	32	59.3	823	2	US-09-548-796A-19339	Sequence 517, A
106	63.0	573	2	US-09-270-767-45753	Sequence 45753, A	179	32	59.3	1195	2	US-09-538-092-517	Sequence 80, Appl
107	61.1	51	1	US-08-464-517-12	Sequence 12, Appl	180	32	59.3	1327	2	US-10-037-417-70	Sequence 70, Appl
108	61.1	51	1	US-08-246-361A-12	Sequence 12, Appl	181	32	59.3	1422	2	US-08-469-260A-82	Sequence 82, Appl
109	61.1	51	1	US-08-463-772-12	Sequence 12, Appl	182	32	59.3	1422	2	US-08-468-446-82	Sequence 82, Appl
110	61.1	51	4	PCR-US93-05000-12	Sequence 12, Appl	183	32	59.3	1422	2	US-08-467-344A-82	Sequence 82, Appl
111	61.1	62	2	US-10-108-311-3	Sequence 3, Appl	184	32	59.3	1422	2	US-08-424-550B-82	Sequence 82, Appl
112	61.1	79	2	US-09-732-210-348	Sequence 348, App	185	31.5	58.3	105	2	US-09-248-796A-14228	Sequence 14228, A
113	61.1	133	2	US-09-710-279-1962	Sequence 1962, Ap	186	31	57.4	22	2	US-09-205-258-895	Sequence 895, App
114	61.1	198	2	US-09-248-796A-21732	Sequence 21732, A	187	31	57.4	22	2	US-09-201-227A-32	Sequence 32, Appl
115	61.1	263	2	US-09-653-813-4	Sequence 4, Appl1	188	31	57.4	25	2	US-09-084-303B-228	Sequence 32, Appl
116	61.1	263	2	US-09-653-813-6	Sequence 6, Appl1	189	31	57.4	60	2	US-09-270-767-16963	Sequence 36963, A
117	61.1	278	2	US-09-543-681A-5024	Sequence 5024, Ap	190	31	57.4	60	2	US-09-270-767-52180	Sequence 52180, A
118	61.1	301	2	US-09-248-796A-23478	Sequence 23478, A	191	31	57.4	66	2	US-09-248-796A-25247	Sequence 25247, A
119	61.1	500	2	US-08-158-735A-2	Sequence 2, Appl1	192	31	57.4	70	2	US-09-252-991A-29915	Sequence 29915, A
120	61.1	532	1	US-08-481-337A-6	Sequence 6, Appl1	193	31	57.4	70	2	US-09-543-681A-5998	Sequence 5998, Ap
121	61.1	532	1	US-09-382-256-6	Sequence 6, Appl1	194	31	57.4	74	2	US-08-936-165A-456	Sequence 456, App
122	61.1	532	2	US-09-382-256-14	Sequence 14, Appl1	195	31	57.4	74	2	US-08-936-165A-456	Sequence 456, App
123	61.1	532	2	US-08-158-735A-4	Sequence 4, Appl1	196	31	57.4	80	2	US-09-732-210-342	Sequence 5167, Ap
124	61.1	532	2	US-09-395-115-6	Sequence 6, Appl1	197	31	57.4	86	2	US-09-621-976-5167	Sequence 8970, Ap
125	61.1	532	2	US-09-395-115-14	Sequence 14, Appl1	198	31	57.4	86	2	US-09-489-039A-8970	Sequence 41, Appl
126	61.1	532	2	US-08-123-934A-2	Sequence 2, Appl1	199	31	57.4	92	2	US-09-201-227A-41	Sequence 32716, A
127	61.1	532	2	US-08-334-179A-12	Sequence 12, Appl1	200	31	57.4	95	2	US-09-107-532A-6163	Sequence 6163, Ap
128	61.1	532	2	US-08-436-265-6	Sequence 6, Appl1	201	31	57.4	112	2	US-09-270-767-40788	Sequence 40788, A
129	61.1	532	2	US-08-436-265-14	Sequence 14, Appl1	202	31	57.4	112	2	US-09-270-767-56004	Sequence 56004, A
130	61.1	532	2	US-09-679-187-6	Sequence 6, Appl1	203	31	57.4	112	2	US-09-248-796A-17853	Sequence 17853, A
131	61.1	532	2	US-09-679-187-14	Sequence 14, Appl1	204	31	57.4	112	2	US-09-270-767-17657	Sequence 37657, A
132	61.1	532	2	US-09-874-628-2	Sequence 2, Appl1	205	31	57.4	123	2	US-09-270-767-12874	Sequence 52874, A
133	61.1	532	2	US-08-448-371A-6	Sequence 6, Appl1	206	31	57.4	130	2	US-08-328-799-37	Sequence 37, Appl
134	61.1	532	2	US-09-267-963D-6	Sequence 6, Appl1	207	31	57.4	143	2	US-09-583-110-4238	Sequence 4238, Ap
135	61.1	532	2	US-09-267-963D-14	Sequence 14, Appl1	208	31	57.4	143	2	US-09-107-532A-7085	Sequence 7085, Ap
136	61.1	532	4	PCR-US94-10080-2	Sequence 6475, Ap	209	31	57.4	205	2	US-09-252-991A-26436	Sequence 26436, A
137	61.1	532	4	PCR-US95-05457-6	Sequence 2, Appl1	210	31	57.4	210	2	US-09-949-016-8463	Sequence 8463, Ap
138	61.1	532	4	PCR-US95-05457-6	Sequence 6, Appl1	211	31	57.4	212	2	US-08-162-475A-4	Sequence 4, Appl1
139	61.1	533	2	US-09-949-016-7785	Sequence 7785, Ap	212	31	57.4	253	1	US-08-162-475A-2	Sequence 2, Appl1
140	61.1	567	2	US-09-843-378-13	Sequence 13, Appl	213	31	57.4	253	1	US-08-358-111-10	Sequence 10, Appl
141	61.1	604	2	US-09-134-000C-5256	Sequence 5256, Ap	214	31	57.4	253	2	US-09-090-947-10	Sequence 39, Appl
142	61.1	9	2	US-08-159-339A-245	Sequence 247, App	215	31	57.4	254	1	US-08-475-427-1	Sequence 1, Appl1
143	61.1	95	2	US-09-270-767-34319	Sequence 34319, A	216	31	57.4	254	1	US-07-842-165-1	Sequence 3, Appl1
144	61.1	95	2	US-09-270-767-48536	Sequence 48536, A	217	31	57.4	254	2	US-08-448-398-3	Sequence 3, Appl1
145	61.1	102	1	US-08-750-856A-16	Sequence 16, Appl	218	31	57.4	254	2	US-09-586-106D-113	Sequence 113, App
146	61.1	102	1	US-08-750-856A-17	Sequence 17, Appl	219	31	57.4	254	2	US-10-799-870-113	Sequence 113, App
147	61.1	102	1	US-08-750-856A-18	Sequence 18, Appl	220	31	57.4	270	2	US-09-495-406-25	Sequence 39, Appl
148	61.1	102	1	US-08-750-856A-19	Sequence 19, Appl	221	31	57.4	270	2	US-09-816-028A-39	Sequence 39, Appl
149	61.1	127	2	US-09-270-767-40134	Sequence 40134, A	222	31	57.4	270	2	US-10-303-162-39	Sequence 39, Appl
150	61.1	127	2	US-09-270-767-55350	Sequence 55350, A	223	31	57.4	270	2	US-10-303-118-39	Sequence 39, Appl
151	61.1	149	2	US-09-949-016-9906	Sequence 9906, Ap	224	31	57.4	270	2	US-10-303-118-39	Sequence 39, Appl
152	61.1	164	2	US-09-134-001C-5317	Sequence 5317, Ap	225	31	57.4	281	2	US-09-522-714-2	Sequence 39, Appl
153	61.1	182	2	US-09-328-352-7249	Sequence 7249, Ap	226	31	57.4	281	2	US-09-522-714-2	Sequence 39, Appl
154	61.1	253	1	US-08-162-475A-5	Sequence 5, Appl1	227	31	57.4	283	2	US-09-205-268-004	Sequence 904, App
155	61.1	253	2	US-07-791-931-9	Sequence 9, Appl1	228	31	57.4	283	2	US-10-004-860-904	Sequence 904, App
156	61.1	253	2	US-10-300-81B-18	Sequence 18, Appl	229	31	57.4	284	2	US-09-522-689A-2	Sequence 2, Appl1
157	61.1	253	2	US-09-328-352-6852	Sequence 6852, Ap	230	31	57.4	284	2	US-09-949-016-6967	Sequence 6967, Ap
158	61.1	263	2	US-08-311-731A-174	Sequence 174, App	231	31	57.4	290	2	US-09-949-016-11587	Sequence 11587, A
159	61.1	271	2	US-09-248-796A-19265	Sequence 19265, A	232	31	57.4	291	1	US-08-358-111-4	Sequence 4, Appl1
160	61.1	280	2	US-09-489-039A-7566	Sequence 7566, Ap	233	31	57.4	291	1	US-09-090-947-4	Sequence 4, Appl1
161	61.1	312	1	US-09-014-969-17	Sequence 17, Appl	234	31	57.4	291	1	US-08-475-427-6	Sequence 6, Appl1
162	61.1	421	2	US-09-252-991A-17417	Sequence 17417, A	235	31	57.4	302	1	US-08-448-398-3	Sequence 3, Appl1
163	61.1	437	2	US-09-328-352-5102	Sequence 5102, Ap	236	31	57.4	302	1	US-07-842-165-5	Sequence 5, Appl1
164	61.1	452	2	US-09-270-767-60765	Sequence 60765, A	237	31	57.4	310	1	US-07-704-288C-6	Sequence 6, Appl1
165	61.1	482	2	US-09-538-092-454	Sequence 454, App	238	31	57.4	310	2	US-08-379-259-6	Sequence 6, Appl1
166	61.1	551	2	US-09-489-039A-9510	Sequence 9510, Ap	239	31	57.4	314	1	US-07-791-931-6	Sequence 6, Appl1
167	61.1	617	2	US-09-107-532A-6828	Sequence 6828, Ap	240	31	57.4	314	1	US-07-704-288C-7	Sequence 7, Appl1
168	61.1	726	2	US-09-392-714-21	Sequence 21, Appl	241	31	57.4	314	1	US-08-379-259-7	Sequence 7, Appl1
169	61.1	731	2	US-09-949-016-9763	Sequence 9763, Ap	242	31	57.4	322	2	US-09-252-991A-32845	Sequence 32845, A
170	61.1	744	2	US-09-248-796A-18090	Sequence 18090, A	243	31	57.4	324	1	US-08-047-413-11	Sequence 11, Appl
171	61.1	755	2	US-09-270-767-45272	Sequence 45272, A	244	31	57.4	324	1	US-08-229-050-11	Sequence 11, Appl
172	61.1	816	1	US-08-820-170A-37	Sequence 37, Appl	245	31	57.4	324	2	US-08-801-563-11	Sequence 11, Appl
173	61.1	816	2	US-09-055-699-37	Sequence 37, Appl	246	31	57.4	326	2	US-07-791-931-5	Sequence 5, Appl1

247	31	57.4	329	1	US-08-475-427-13	Sequence 13, Appl	320	30	55.6	139	2	US-08-706-945D-129	Sequence 129, App
248	31	57.4	329	1	US-07-842-165-13	Sequence 13, Appl	321	30	55.6	152	2	US-09-270-767-31847	Sequence 31847, A
249	31	57.4	329	1	US-10-300-819B-17	Sequence 17, Appl	322	30	55.6	152	2	US-09-270-767-47064	Sequence 47064, A
250	31	57.4	330	1	US-07-704-288C-8	Sequence 8, Appl	323	30	55.6	153	1	US-08-050-319B-52	Sequence 52, Appl
251	31	57.4	330	1	US-08-379-259-8	Sequence 8, Appl	324	30	55.6	153	1	US-08-465-982-52	Sequence 52, Appl
252	31	57.4	330	1	US-09-902-540-12410	Sequence 12410, A	325	30	55.6	153	1	US-08-219-237B-4	Sequence 4, Appl
253	31	57.4	334	2	US-09-417-485D-45	Sequence 45, Appl	326	30	55.6	153	2	US-08-477-347-12	Sequence 12, Appl
254	31	57.4	360	2	US-09-543-681A-7431	Sequence 7431, Ap	327	30	55.6	153	2	US-08-476-862-3	Sequence 3, Appl
255	31	57.4	370	2	US-09-134-001C-3769	Sequence 3769, Ap	328	30	55.6	153	2	US-08-468-560C-4	Sequence 4, Appl
256	31	57.4	403	2	US-09-270-767-44912	Sequence 44912, A	329	30	55.6	153	2	US-09-800-909-3	Sequence 12, Appl
257	31	57.4	458	2	US-09-489-039A-8987	Sequence 8987, Ap	330	30	55.6	153	2	US-09-800-908-12	Sequence 10, Appl
258	31	57.4	467	2	US-10-325-939-2	Sequence 2, Appl	331	30	55.6	153	2	US-08-884-987-4	Sequence 4, Appl
259	31	57.4	546	2	US-09-252-991A-19089	Sequence 19089, A	332	30	55.6	154	1	US-08-828-663A-12	Sequence 12, Appl
260	31	57.4	642	2	US-09-543-681A-7169	Sequence 7169, Ap	333	30	55.6	154	2	US-08-828-663A-12	Sequence 53, Appl
261	31	57.4	709	4	PCR-US92-00731-13	Sequence 13, Appl	334	30	55.6	154	2	US-09-522-323-53	Sequence 50, Appl
262	31	57.4	727	2	US-09-543-681A-6690	Sequence 6690, Ap	335	30	55.6	157	1	US-08-050-319B-50	Sequence 50, Appl
263	31	57.4	786	2	US-09-543-681A-6379	Sequence 6379, Ap	336	30	55.6	157	1	US-08-465-982-50	Sequence 2, Appl
264	31	57.4	891	2	US-10-226-629A-16	Sequence 16, Appl	337	30	55.6	167	1	US-09-326-394-2	Sequence 2, Appl
265	31	57.4	892	2	US-10-226-629A-15	Sequence 15, Appl	338	30	55.6	167	1	US-08-050-319B-57	Sequence 57, Appl
266	31	57.4	944	2	US-09-543-681A-4864	Sequence 4864, Ap	339	30	55.6	167	1	US-08-465-982-2	Sequence 2, Appl
267	31	57.4	975	2	US-09-543-681A-5755	Sequence 5755, Ap	340	30	55.6	167	1	US-08-465-982-57	Sequence 57, Appl
268	31	57.4	988	2	US-08-974-843A-69	Sequence 69, Appl	341	30	55.6	196	2	US-09-248-796A-19761	Sequence 19761, A
269	31	57.4	988	2	US-08-854-050-69	Sequence 69, Appl	342	30	55.6	196	2	US-08-828-630B-2	Sequence 21, Appl
270	31	57.4	988	2	US-08-854-050-69	Sequence 69, Appl	343	30	55.6	198	2	US-08-828-630B-2	Sequence 2, Appl
271	31	57.4	988	2	US-09-430-323-69	Sequence 69, Appl	344	30	55.6	198	2	US-08-828-630B-2	Sequence 2, Appl
272	31	57.4	988	2	US-08-912-951-112	Sequence 112, Appl	345	30	55.6	198	2	US-08-771-212A-2	Sequence 2, Appl
273	31	57.4	988	2	US-09-402-181B-112	Sequence 112, Appl	346	30	55.6	198	2	US-09-945-249-2	Sequence 2, Appl
274	31	57.4	988	2	US-09-721-456-112	Sequence 112, Appl	347	30	55.6	198	2	US-09-041-990-2	Sequence 2, Appl
275	31	57.4	988	2	US-09-766-253-69	Sequence 69, Appl	348	30	55.6	198	2	US-09-792-024-122	Sequence 48, Appl
276	31	57.4	988	2	US-10-054-295-69	Sequence 69, Appl	349	30	55.6	199	1	US-08-050-319B-48	Sequence 48, Appl
277	31	57.4	988	2	US-09-438-486A-69	Sequence 69, Appl	350	30	55.6	199	1	US-08-465-982-48	Sequence 5, Appl
278	31	57.4	1068	2	US-08-390-874C-11	Sequence 11, Appl	351	30	55.6	199	1	US-08-737-248-5	Sequence 19762, A
279	31	57.4	1068	2	US-09-265-772-11	Sequence 11, Appl	352	30	55.6	201	2	US-09-248-796A-20489	Sequence 20489, A
280	31	57.4	1068	2	US-09-538-092-1111	Sequence 1111, Ap	353	30	55.6	221	2	US-09-598-401C-70	Sequence 104, Appl
281	31	57.4	1068	2	US-09-487-558B-242	Sequence 242, App	354	30	55.6	221	2	US-09-598-401C-70	Sequence 104, Appl
282	31	57.4	1069	1	US-08-162-081B-37	Sequence 37, Appl	355	30	55.6	202	1	US-09-540-236-1926	Sequence 1926, Ap
283	31	57.4	1069	1	US-08-780-872-37	Sequence 37, Appl	356	30	55.6	202	1	US-09-540-236-1926	Sequence 73, Appl
284	31	57.4	1069	1	US-09-085-957-37	Sequence 37, Appl	357	30	55.6	202	1	US-09-540-236-1926	Sequence 73, Appl
285	31	57.4	1080	1	US-08-162-081B-36	Sequence 36, Appl	358	30	55.6	211	2	US-09-368-402-11	Sequence 26891, A
286	31	57.4	1080	1	US-08-780-872-36	Sequence 36, Appl	359	30	55.6	211	2	US-09-368-402-11	Sequence 1, Appl
287	31	57.4	1080	2	US-09-085-957-36	Sequence 36, Appl	360	30	55.6	211	2	US-10-125-062-1	Sequence 1, Appl
288	31	57.4	1138	1	US-07-973-320-2	Sequence 2, Appl	361	30	55.6	224	2	US-09-598-401C-70	Sequence 104, Appl
289	31	57.4	1138	1	US-07-973-320-2	Sequence 2, Appl	362	30	55.6	224	2	US-09-598-401C-70	Sequence 104, Appl
290	31	57.4	1199	2	US-09-208-742-2	Sequence 2, Appl	363	30	55.6	224	2	US-09-598-401C-70	Sequence 104, Appl
291	31	57.4	1199	2	US-09-332-295-4	Sequence 4, Appl	364	30	55.6	224	2	US-09-598-401C-70	Sequence 104, Appl
292	31	57.4	1199	2	US-09-709-979-4	Sequence 4, Appl	365	30	55.6	249	2	US-10-799-870-73	Sequence 73, Appl
293	31	57.4	1199	2	US-10-147-268-4	Sequence 4, Appl	366	30	55.6	249	2	US-10-799-870-73	Sequence 73, Appl
294	31	57.4	2108	2	US-09-538-092-87	Sequence 87, Appl	367	30	55.6	254	2	US-09-586-106D-59	Sequence 59, Appl
295	30	55.6	7	2	US-09-731-242A-44	Sequence 44, Appl	368	30	55.6	254	2	US-09-586-106D-59	Sequence 59, Appl
296	30	55.6	14	2	US-09-122-315C-14	Sequence 14, Appl	369	30	55.6	254	2	US-09-586-106D-59	Sequence 59, Appl
297	30	55.6	14	2	US-09-360-376-2	Sequence 2, Appl	370	30	55.6	254	2	US-09-586-106D-59	Sequence 59, Appl
298	30	55.6	15	1	US-08-221-583-9	Sequence 9, Appl	371	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
299	30	55.6	15	1	US-08-221-583-9	Sequence 9, Appl	372	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
300	30	55.6	15	4	PCT-US95-04018-10	Sequence 10, Appl	373	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
301	30	55.6	15	4	PCT-US95-04018-10	Sequence 10, Appl	374	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
302	30	55.6	41	1	US-08-050-319B-36	Sequence 36, Appl	375	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
303	30	55.6	41	1	US-08-050-319B-36	Sequence 36, Appl	376	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
304	30	55.6	62	2	US-08-465-982-36	Sequence 36, Appl	377	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
305	30	55.6	62	2	US-08-465-982-36	Sequence 36, Appl	378	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
306	30	55.6	62	2	US-08-465-982-36	Sequence 36, Appl	379	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
307	30	55.6	70	2	US-09-513-999C-7714	Sequence 7714, Ap	380	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
308	30	55.6	70	2	US-09-489-039A-10421	Sequence 10421, A	381	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
309	30	55.6	71	2	US-09-902-540-16355	Sequence 16355, A	382	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
310	30	55.6	74	2	US-09-248-796A-22972	Sequence 22972, A	383	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
311	30	55.6	74	2	US-08-866-545-1	Sequence 1, Appl	384	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
312	30	55.6	98	2	US-09-627-775-1	Sequence 1, Appl	385	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
313	30	55.6	101	2	US-09-248-796A-24909	Sequence 24909, A	386	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
314	30	55.6	110	2	US-09-583-110-2904	Sequence 110, Ap	387	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
315	30	55.6	124	1	US-10-104-047-3086	Sequence 3086, Ap	388	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
316	30	55.6	124	1	US-08-050-319B-4	Sequence 4, Appl	389	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
317	30	55.6	124	1	US-08-465-982-4	Sequence 4, Appl	390	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
318	30	55.6	136	2	US-09-198-452A-42	Sequence 42, Appl	391	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
319	30	55.6	138	2	US-09-107-433-4740	Sequence 4740, Ap	392	30	55.6	254	2	US-10-799-870-75	Sequence 75, Appl
			138	2	US-09-270-767-32892	Sequence 32892, A							
			138	2	US-09-270-767-48109	Sequence 48109, A							

393	30	55.6	285	2	US-08-804-166-6	Sequence 6, Appl1	466	30	55.6	485	1	US-08-749-391-2	Sequence 2, Appl1
394	30	55.6	285	2	US-08-910-991-6	Sequence 6, Appl1	467	30	55.6	485	2	US-09-390-200-2	Sequence 2, Appl1
395	30	55.6	285	2	US-08-992-035A-1	Sequence 1, Appl1	468	30	55.6	509	2	US-09-270-767-43848	Sequence 43848, A
396	30	55.6	285	2	US-09-756-186-6	Sequence 6, Appl1	469	30	55.6	515	2	US-09-487-558B-384	Sequence 384, App
397	30	55.6	290	2	US-09-710-279-3024	Sequence 3024, Ap	470	30	55.6	519	2	US-09-248-796A-20852	Sequence 20852, A
398	30	55.6	290	2	US-09-710-279-3252	Sequence 3252, Ap	471	30	55.6	563	2	US-09-949-016-6277	Sequence 8277, Ap
399	30	55.6	295	2	US-09-134-001C-3777	Sequence 3777, Ap	472	30	55.6	580	2	US-09-949-016-6405	Sequence 6405, Ap
400	30	55.6	301	2	US-09-248-796A-26140	Sequence 26140, A	473	30	55.6	593	2	US-09-248-796A-14472	Sequence 14472, A
401	30	55.6	307	2	US-08-804-166-4	Sequence 4, Appl1	474	30	55.6	594	2	US-09-468-872-2	Sequence 2, Appl1
402	30	55.6	307	2	US-08-910-991-4	Sequence 4, Appl1	475	30	55.6	605	2	US-09-328-352-7890	Sequence 7890, Ap
403	30	55.6	307	2	US-09-756-186-4	Sequence 4, Appl1	476	30	55.6	610	2	US-09-949-016-9964	Sequence 9964, Ap
404	30	55.6	319	2	US-09-438-185A-26	Sequence 26, Appl1	477	30	55.6	618	2	US-09-134-001C-4039	Sequence 4039, Ap
405	30	55.6	319	2	US-09-248-796A-17358	Sequence 17358, A	478	30	55.6	624	2	US-09-248-796A-20093	Sequence 20093, A
406	30	55.6	325	2	US-09-605-703B-2166	Sequence 2166, Ap	479	30	55.6	704	2	US-09-409-180A-1	Sequence 1, Appl1
407	30	55.6	329	2	US-09-489-039A-9402	Sequence 9402, Ap	480	30	55.6	741	2	US-09-436-699C-22	Sequence 22, Appl1
408	30	55.6	336	2	US-08-804-166-8	Sequence 8, Appl1	481	30	55.6	802	2	US-10-012-211A-260	Sequence 260, App
409	30	55.6	336	2	US-08-910-991-8	Sequence 8, Appl1	482	30	55.6	802	2	US-10-015-389A-260	Sequence 260, App
410	30	55.6	336	2	US-08-756-186-8	Sequence 8, Appl1	483	30	55.6	802	2	US-10-006-768A-260	Sequence 260, App
411	30	55.6	348	2	US-09-540-236-3381	Sequence 3381, Ap	484	30	55.6	802	2	US-10-015-671A-260	Sequence 260, App
412	30	55.6	359	2	US-09-134-000C-4630	Sequence 4630, Ap	485	30	55.6	802	2	US-10-015-393A-260	Sequence 260, App
413	30	55.6	410	2	US-09-252-991A-30570	Sequence 30570, A	486	30	55.6	802	2	US-10-011-833A-260	Sequence 260, App
414	30	55.6	411	2	US-09-491-577-66	Sequence 66, Appl1	487	30	55.6	802	2	US-10-006-041A-260	Sequence 260, App
415	30	55.6	412	2	US-09-270-767-43247	Sequence 43247, A	488	30	55.6	802	2	US-10-012-064A-260	Sequence 260, App
416	30	55.6	420	2	US-10-104-047-3015	Sequence 3015, Ap	489	30	55.6	909	2	US-09-013-895A-4	Sequence 4, Appl1
417	30	55.6	426	2	US-08-747-562-37	Sequence 37, Appl1	490	30	55.6	909	2	US-09-448-868A-4	Sequence 4, Appl1
418	30	55.6	437	2	US-09-073-562-2	Sequence 2, Appl1	491	30	55.6	1021	2	US-09-543-661A-7383	Sequence 7383, Ap
419	30	55.6	437	2	US-09-830-189C-2	Sequence 2, Appl1	492	30	55.6	1123	2	US-10-037-417-71	Sequence 71, Appl1
420	30	55.6	437	2	US-09-991-181-355	Sequence 355, App	493	30	55.6	1531	1	US-08-141-893-2	Sequence 2, Appl1
421	30	55.6	437	2	US-09-990-444-355	Sequence 355, App	494	30	55.6	1531	1	US-08-463-092B-2	Sequence 2, Appl1
422	30	55.6	437	2	US-10-033-301-16	Sequence 16, Appl1	495	30	55.6	1531	1	US-08-463-092B-4	Sequence 2, Appl1
423	30	55.6	437	2	US-09-997-333-355	Sequence 355, App	496	30	55.6	1531	1	US-08-463-109A-2	Sequence 2, Appl1
424	30	55.6	437	2	US-09-992-598-355	Sequence 355, App	497	30	55.6	1531	1	US-08-463-109A-2	Sequence 2, Appl1
425	30	55.6	442	2	US-09-270-767-59249	Sequence 59249, A	498	30	55.6	1531	1	US-08-460-907B-2	Sequence 2, Appl1
426	30	55.6	448	2	US-09-361-443-4	Sequence 4, Appl1	499	30	55.6	1531	1	US-08-460-907B-4	Sequence 2, Appl1
427	30	55.6	453	2	US-09-086-483A-5	Sequence 5, Appl1	500	30	55.6	1531	1	US-08-460-907B-4	Sequence 2, Appl1
428	30	55.6	453	2	US-09-580-212-5	Sequence 5, Appl1	501	30	55.6	1531	2	US-08-463-179A-2	Sequence 2, Appl1
429	30	55.6	453	2	US-09-769-402-5	Sequence 5, Appl1	502	30	55.6	1531	2	US-08-463-179A-4	Sequence 2, Appl1
430	30	55.6	455	1	US-08-050-319B-25	Sequence 25, Appl1	503	30	55.6	1531	2	US-08-461-384B-2	Sequence 2, Appl1
431	30	55.6	455	1	US-08-321-668-2	Sequence 2, Appl1	504	30	55.6	1531	2	US-08-461-384B-4	Sequence 2, Appl1
432	30	55.6	455	1	US-08-837-941-2	Sequence 2, Appl1	505	30	55.6	1531	2	US-08-407-207A-2	Sequence 2, Appl1
433	30	55.6	455	1	US-08-126-016-2	Sequence 2, Appl1	506	30	55.6	1724	1	US-09-647-140B-19	Sequence 19, Appl1
434	30	55.6	455	1	US-08-465-982-25	Sequence 25, Appl1	507	30	55.6	476	2	US-09-561-756-27	Sequence 27, Appl1
435	30	55.6	455	2	US-08-815-469-5	Sequence 5, Appl1	508	29.5	54.6	476	2	US-09-227-721-27	Sequence 27, Appl1
436	30	55.6	455	2	US-09-006-353A-3	Sequence 3, Appl1	509	29.5	54.6	476	2	US-09-954-697-27	Sequence 27, Appl1
437	30	55.6	455	2	US-09-527-235A-5	Sequence 5, Appl1	510	29.5	54.6	476	2	US-08-665-220-4	Sequence 4, Appl1
438	30	55.6	455	2	US-08-054-970-2	Sequence 2, Appl1	511	29.5	54.6	496	1	US-09-291-692-4	Sequence 4, Appl1
439	30	55.6	455	2	US-09-565-918-4	Sequence 4, Appl1	512	29.5	54.6	496	2	US-09-952-768-4	Sequence 4, Appl1
440	30	55.6	455	2	US-09-573-986-3	Sequence 3, Appl1	513	29.5	54.6	496	2	US-09-952-768-4	Sequence 4, Appl1
441	30	55.6	455	2	US-09-027-287-3	Sequence 3, Appl1	514	29.5	54.6	496	2	US-10-668-955-4	Sequence 4, Appl1
442	30	55.6	455	2	US-09-252-656B-3	Sequence 3, Appl1	515	29.5	54.6	505	2	US-09-949-016-11473	Sequence 11473, A
443	30	55.6	455	2	US-08-406-824A-4	Sequence 4, Appl1	516	29	53.7	15	1	US-08-159-339A-88	Sequence 88, Appl1
444	30	55.6	455	2	US-09-523-323-3	Sequence 3, Appl1	517	29	53.7	15	1	US-08-221-583-11	Sequence 11, Appl1
445	30	55.6	455	2	US-09-756-854-5	Sequence 5, Appl1	518	29	53.7	15	4	PCT-US95-04018-11	Sequence 11, Appl1
446	30	55.6	455	2	US-09-583-110-3993	Sequence 3993, Ap	519	29	53.7	20	1	US-08-700-442A-12	Sequence 12, Appl1
447	30	55.6	455	2	US-09-557-908-5	Sequence 5, Appl1	520	29	53.7	20	2	US-09-258-934-40	Sequence 57, Appl1
448	30	55.6	455	2	US-09-874-138-3	Sequence 3, Appl1	521	29	53.7	20	2	US-08-831-028-12	Sequence 12, Appl1
449	30	55.6	455	2	US-09-333-966-5	Sequence 5, Appl1	522	29	53.7	20	2	US-09-619-283B-57	Sequence 57, Appl1
450	30	55.6	455	2	US-09-565-009B-3	Sequence 3, Appl1	523	29	53.7	20	2	US-10-328-135-57	Sequence 57, Appl1
451	30	55.6	455	2	US-10-175-902-4	Sequence 4, Appl1	524	29	53.7	22	2	US-10-612-818-5	Sequence 5, Appl1
452	30	55.6	455	2	US-10-041-574-5	Sequence 5, Appl1	525	29	53.7	25	2	US-09-258-934-40	Sequence 40, Appl1
453	30	55.6	455	2	US-09-095-094-5	Sequence 5, Appl1	526	29	53.7	25	2	US-09-619-283B-40	Sequence 40, Appl1
454	30	55.6	455	2	US-09-314-889-5	Sequence 5, Appl1	527	29	53.7	25	2	US-10-328-125-40	Sequence 40, Appl1
455	30	55.6	455	2	US-09-949-016-7946	Sequence 7946, Ap	528	29	53.7	32	1	US-08-466-285-4	Sequence 4, Appl1
456	30	55.6	460	2	US-09-949-016-6663	Sequence 6663, Ap	529	29	53.7	32	2	US-08-164-768-4	Sequence 4, Appl1
457	30	55.6	461	2	US-09-902-540-14028	Sequence 14028, A	530	29	53.7	40	2	US-09-270-767-77016	Sequence 32016, A
458	30	55.6	466	2	US-09-198-452A-936	Sequence 936, App	531	29	53.7	40	2	US-09-270-767-77016	Sequence 32016, A
459	30	55.6	467	2	US-09-361-443-2	Sequence 2, Appl1	532	29	53.7	60	2	US-09-493-795B-95	Sequence 95, Appl1
460	30	55.6	469	2	US-09-198-452A-793	Sequence 793, App	533	29	53.7	61	1	US-08-248-899C-79	Sequence 79, Appl1
461	30	55.6	469	2	US-09-438-185A-745	Sequence 745, App	534	29	53.7	61	2	US-09-248-796A-25761	Sequence 25761, A
462	30	55.6	477	2	US-09-248-796A-21985	Sequence 21985, A	535	29	53.7	61	2	US-09-640-211A-2342	Sequence 2342, Ap
463	30	55.6	478	2	US-09-438-185A-872	Sequence 872, App	536	29	53.7	63	2	US-09-248-796A-24718	Sequence 24718, A
464	30	55.6	480	2	US-09-107-433-4906	Sequence 4906, Ap	537	29	53.7	66	2	US-09-248-796A-21302	Sequence 21302, Ap
465	30	55.6	484	2	US-09-826-313-32	Sequence 32, Appl1	538	29	53.7	70	2	US-09-134-000C-3537	Sequence 3537, A

539	29	53.7	71	2	US-09-513-999C-4761	Sequence 4761, Ap	612	29	53.7	222	2	US-09-640-211A-923	Sequence 923, App
540	29	53.7	75	2	US-09-248-796A-22612	Sequence 22612, A	613	29	53.7	235	2	US-09-978-248A-8	Sequence 8, Appl
541	29	53.7	78	2	US-09-732-210-338	Sequence 338, App	614	29	53.7	245	2	US-08-468-260A-42	Sequence 42, Appl
542	29	53.7	78	2	US-09-270-767-37247	Sequence 37247, A	615	29	53.7	245	2	US-08-468-446-6	Sequence 42, Appl
543	29	53.7	78	2	US-09-732-210-345	Sequence 52464, A	616	29	53.7	245	2	US-08-467-344A-42	Sequence 42, Appl
544	29	53.7	79	2	US-09-732-210-343	Sequence 343, App	617	29	53.7	245	2	US-08-424-550B-42	Sequence 42, Appl
545	29	53.7	79	2	US-09-732-210-345	Sequence 345, App	618	29	53.7	246	2	US-09-438-165A-544	Sequence 544, App
546	29	53.7	79	2	US-09-732-210-347	Sequence 347, App	619	29	53.7	250	2	US-09-252-991A-19568	Sequence 19568, A
547	29	53.7	79	2	US-09-732-210-352	Sequence 352, App	620	29	53.7	252	2	US-09-522-714-20	Sequence 20, Appl
548	29	53.7	80	1	US-08-485-455D-69	Sequence 69, Appl	621	29	53.7	254	2	US-09-586-166D-81	Sequence 81, Appl
549	29	53.7	80	1	US-08-482-130C-69	Sequence 69, Appl	622	29	53.7	254	2	US-09-586-106D-85	Sequence 85, Appl
550	29	53.7	80	1	US-08-484-211C-69	Sequence 69, Appl	623	29	53.7	254	2	US-09-586-106D-87	Sequence 87, Appl
551	29	53.7	80	2	US-08-906-769-69	Sequence 69, Appl	624	29	53.7	254	2	US-10-799-870-81	Sequence 87, Appl
552	29	53.7	80	2	US-08-906-616-69	Sequence 69, Appl	625	29	53.7	254	2	US-10-799-870-85	Sequence 85, Appl
553	29	53.7	80	2	US-08-817-795-69	Sequence 69, Appl	626	29	53.7	254	2	US-09-270-767-35544	Sequence 35544, A
554	29	53.7	80	2	US-08-485-443B-69	Sequence 69, Appl	627	29	53.7	264	2	US-09-467-674-48761	Sequence 48761, A
555	29	53.7	80	2	US-08-639-075A-69	Sequence 69, Appl	628	29	53.7	267	2	US-09-710-279-882	Sequence 882, App
556	29	53.7	80	2	US-09-012-431-69	Sequence 69, Appl	629	29	53.7	271	2	US-08-117-083-14	Sequence 14, Appl
557	29	53.7	80	2	US-09-012-692-69	Sequence 69, Appl	630	29	53.7	278	2	US-09-485-885-21	Sequence 21, Appl
558	29	53.7	80	2	US-08-906-613-69	Sequence 69, Appl	631	29	53.7	282	2	US-09-252-991A-28046	Sequence 28046, A
559	29	53.7	80	2	US-09-370-838-32	Sequence 32, Appl	632	29	53.7	282	2	US-09-134-001C-4756	Sequence 4756, Ap
560	29	53.7	80	2	US-09-732-210-344	Sequence 344, App	633	29	53.7	285	2	US-09-107-532A-4626	Sequence 4626, Ap
561	29	53.7	80	2	US-09-732-210-346	Sequence 346, App	634	29	53.7	307	2	US-09-902-540-14159	Sequence 14159, A
562	29	53.7	80	2	US-09-732-210-353	Sequence 353, App	635	29	53.7	313	2	US-09-710-279-792	Sequence 792, App
563	29	53.7	80	2	US-09-854-133-32	Sequence 32, Appl	636	29	53.7	319	2	US-09-912-279-2008	Sequence 2008, Ap
564	29	53.7	80	4	PCT-US95-14442A-69	Sequence 69, Appl	637	29	53.7	319	2	US-09-248-796A-4137	Sequence 14137, A
565	29	53.7	81	2	US-09-732-210-337	Sequence 337, App	638	29	53.7	319	2	US-09-949-016-8512	Sequence 8512, Ap
566	29	53.7	93	2	US-09-198-452A-77	Sequence 77, Appl	639	29	53.7	319	2	US-10-014-269-30	Sequence 30, Appl
567	29	53.7	93	2	US-09-732-210-339	Sequence 339, App	640	29	53.7	320	2	US-10-002-974-30	Sequence 30, Appl
568	29	53.7	93	2	US-09-621-976-6840	Sequence 340, App	641	29	53.7	320	2	US-09-134-000C-3967	Sequence 3967, Ap
569	29	53.7	93	2	US-09-621-976-6840	Sequence 6840, Ap	642	29	53.7	323	2	US-09-543-681A-5214	Sequence 5214, Ap
570	29	53.7	101	1	US-08-341-843B-10	Sequence 10, Appl	643	29	53.7	324	2	US-09-252-991A-31442	Sequence 31442, A
571	29	53.7	101	1	US-08-427-497E-15	Sequence 12, Appl	644	29	53.7	332	2	US-08-700-442A-9	Sequence 9, Appl
572	29	53.7	101	1	US-08-427-497E-15	Sequence 22, Appl	645	29	53.7	333	2	US-08-831-028-9	Sequence 8, Appl
573	29	53.7	101	1	US-08-427-497E-27	Sequence 27, Appl	646	29	53.7	333	2	US-08-933-750C-16	Sequence 16, Appl
574	29	53.7	101	2	US-09-489-039A-12049	Sequence 12049, A	647	29	53.7	334	2	US-09-234-613-16	Sequence 16, Appl
575	29	53.7	131	2	US-09-446-959-6	Sequence 6, Appl	648	29	53.7	334	2	US-09-933-750C-16	Sequence 11685, A
576	29	53.7	135	2	US-09-252-991A-25402	Sequence 25402, A	649	29	53.7	335	2	US-09-949-016-11685	Sequence 8252, Ap
577	29	53.7	143	2	US-09-252-991A-27046	Sequence 27046, A	650	29	53.7	337	2	US-09-949-016-8252	Sequence 8252, Ap
578	29	53.7	144	2	US-09-248-796A-21043	Sequence 21043, A	651	29	53.7	338	2	US-09-538-092-144	Sequence 144, App
579	29	53.7	147	2	US-09-107-532A-4624	Sequence 4624, Ap	652	29	53.7	338	2	US-09-442-349A-65	Sequence 65, Appl
580	29	53.7	148	2	US-09-216-393B-142	Sequence 142, App	653	29	53.7	343	1	US-08-856-444-2	Sequence 67, Appl
581	29	53.7	150	2	US-09-640-211A-654	Sequence 654, App	654	29	53.7	350	2	US-09-540-232-2058	Sequence 2058, Ap
582	29	53.7	153	2	US-09-252-991A-30249	Sequence 30249, A	655	29	53.7	351	2	US-09-107-532A-3687	Sequence 3687, Ap
583	29	53.7	155	2	US-09-640-211A-642	Sequence 642, App	656	29	53.7	362	2	US-09-134-001C-4670	Sequence 4670, Ap
584	29	53.7	156	1	US-09-070-060-7	Sequence 7, Appl	657	29	53.7	364	2	US-09-489-039A-12051	Sequence 12051, A
585	29	53.7	156	2	US-09-051-969A-3	Sequence 3, Appl	658	29	53.7	365	2	US-09-721-870-36	Sequence 36, Appl
586	29	53.7	156	2	US-09-051-969A-4	Sequence 4, Appl	659	29	53.7	374	2	US-09-949-016-6877	Sequence 6877, Ap
587	29	53.7	156	2	US-09-357-746-7	Sequence 7, Appl	660	29	53.7	374	2	US-09-442-349A-64	Sequence 64, Appl
588	29	53.7	156	2	US-09-665-479A-10	Sequence 10, Appl	661	29	53.7	374	2	US-09-442-349A-65	Sequence 65, Appl
589	29	53.7	157	2	US-09-248-796A-27888	Sequence 27888, A	662	29	53.7	374	2	US-09-442-349A-66	Sequence 66, Appl
590	29	53.7	158	1	US-08-247-904B-10	Sequence 10, Appl	663	29	53.7	374	2	US-09-442-349A-67	Sequence 67, Appl
591	29	53.7	158	2	US-08-767-942A-19	Sequence 19, Appl	664	29	53.7	374	2	US-09-442-349A-68	Sequence 68, Appl
592	29	53.7	158	2	US-08-767-942A-19	Sequence 19, Appl	665	29	53.7	374	2	US-09-442-349A-69	Sequence 69, Appl
593	29	53.7	168	2	US-09-710-279-2430	Sequence 2430, Ap	666	29	53.7	374	2	US-09-442-349A-70	Sequence 70, Appl
594	29	53.7	173	2	US-09-248-796A-16707	Sequence 16707, A	667	29	53.7	374	2	US-09-442-349A-71	Sequence 71, Appl
595	29	53.7	177	2	US-09-248-796A-20170	Sequence 20170, A	668	29	53.7	374	2	US-09-442-349A-72	Sequence 72, Appl
596	29	53.7	178	2	US-09-107-532A-5800	Sequence 5800, Ap	669	29	53.7	374	2	US-09-442-349A-73	Sequence 73, Appl
597	29	53.7	179	2	US-09-583-110-5015	Sequence 5015, Ap	670	29	53.7	374	2	US-09-442-349A-74	Sequence 74, Appl
598	29	53.7	179	2	US-09-769-787-87	Sequence 87, Appl	671	29	53.7	374	2	US-09-442-349A-75	Sequence 75, Appl
599	29	53.7	180	2	US-09-107-433-2844	Sequence 2844, Ap	672	29	53.7	374	2	US-09-442-349A-76	Sequence 76, Appl
600	29	53.7	181	2	US-08-858-207A-317	Sequence 317, App	673	29	53.7	374	2	US-09-442-349A-77	Sequence 77, Appl
601	29	53.7	186	2	US-09-252-991A-33008	Sequence 33008, A	674	29	53.7	374	2	US-09-442-349A-78	Sequence 78, Appl
602	29	53.7	192	2	US-09-543-681A-6818	Sequence 6818, A	675	29	53.7	374	2	US-09-442-349A-79	Sequence 79, Appl
603	29	53.7	196	2	US-09-198-452A-1204	Sequence 1204, Ap	676	29	53.7	374	2	US-09-442-349A-80	Sequence 80, Appl
604	29	53.7	198	2	US-09-540-236-2754	Sequence 2754, Ap	677	29	53.7	374	2	US-09-442-349A-81	Sequence 81, Appl
605	29	53.7	200	2	US-09-099-041A-11	Sequence 11, Appl	678	29	53.7	374	2	US-09-442-349A-82	Sequence 82, Appl
606	29	53.7	200	2	US-09-245-281-11	Sequence 11, Appl	679	29	53.7	374	2	US-09-442-349A-83	Sequence 83, Appl
607	29	53.7	200	2	US-09-207-359B-11	Sequence 11, Appl	680	29	53.7	374	2	US-09-442-349A-84	Sequence 84, Appl
608	29	53.7	200	2	US-09-340-620A-11	Sequence 11, Appl	681	29	53.7	374	2	US-09-442-349A-85	Sequence 85, Appl
609	29	53.7	200	2	US-09-865-364-11	Sequence 11, Appl	682	29	53.7	374	2	US-09-442-349A-86	Sequence 86, Appl
610	29	53.7	212	2	US-09-728-721-11	Sequence 11, Appl	683	29	53.7	374	2	US-09-442-349A-87	Sequence 87, Appl
611	29	53.7	217	2	US-09-388-221B-20	Sequence 20, Appl	684	29	53.7	374	2	US-09-442-349A-88	Sequence 88, Appl
					US-09-252-991A-18564	Sequence 18564, A							

685	29	53.7	374	2	US-09-442-349A-89	Sequence 89, Appl	758	29	53.7	632	2	US-09-661-322A-2	Sequence 2, Appl1
686	29	53.7	374	2	US-09-442-349A-90	Sequence 90, Appl	759	29	53.7	637	2	US-09-489-039A-10817	Sequence 10917, A
687	29	53.7	374	2	US-09-442-349A-91	Sequence 91, Appl	760	29	53.7	643	2	US-09-178-252-25	Sequence 25, Appl
688	29	53.7	374	2	US-09-442-349A-92	Sequence 92, Appl	761	29	53.7	643	2	US-09-826-660-25	Sequence 25, Appl
689	29	53.7	380	2	US-08-307-896-1	Sequence 1, Appl1	762	29	53.7	672	2	US-09-270-767-62194	Sequence 194, A
690	29	53.7	380	2	US-09-949-016-9251	Sequence 9251, Ap	763	29	53.7	720	2	US-09-252-991A-19581	Sequence 19581, A
691	29	53.7	383	2	US-09-485-885-23	Sequence 23, Appl	764	29	53.7	724	2	US-09-949-016-10086	Sequence 10086, A
692	29	53.7	383	2	US-09-248-796A-20241	Sequence 20241, A	765	29	53.7	730	2	US-09-107-443-4707	Sequence 4707, Ap
693	29	53.7	393	2	US-09-107-532A-4627	Sequence 4627, Ap	766	29	53.7	731	1	US-08-731-716-2	Sequence 2, Appl1
694	29	53.7	394	2	US-09-442-349A-106	Sequence 106, App	767	29	53.7	731	3	US-09-583-110-4120	Sequence 4120, Appl
695	29	53.7	394	4	PCR-US95-11808-1	Sequence 1, Appl1	768	29	53.7	731	3	US-09-014-897-2	Sequence 46596, A
696	29	53.7	395	2	US-09-080-044-5	Sequence 5, Appl1	769	29	53.7	734	2	US-09-270-767-46596	Sequence 13491, A
697	29	53.7	395	2	US-09-531-857A-5	Sequence 5, Appl1	770	29	53.7	758	2	US-09-134-001C-4588	Sequence 4588, Ap
698	29	53.7	399	2	US-09-949-016-7504	Sequence 7504, Ap	771	29	53.7	765	2	US-09-323-872A-24	Sequence 24, Appl
699	29	53.7	400	2	US-10-300-819B-2	Sequence 2, Appl1	772	29	53.7	765	2	US-09-323-872A-30	Sequence 30, Appl
700	29	53.7	413	2	US-09-543-681A-6093	Sequence 6093, Ap	773	29	53.7	765	2	US-09-072-433-29	Sequence 29, Appl
701	29	53.7	414	2	US-09-640-211A-2247	Sequence 2247, Ap	774	29	53.7	765	2	US-09-072-433-34	Sequence 34, Appl1
702	29	53.7	419	2	US-09-100-391-4	Sequence 4, Appl1	775	29	53.7	775	2	US-09-513-838-6	Sequence 6, Appl1
703	29	53.7	419	2	US-09-616-614-4	Sequence 4, Appl1	776	29	53.7	781	2	US-09-948-016-9170	Sequence 9170, Ap
704	29	53.7	419	2	US-10-288-273-4	Sequence 4, Appl1	777	29	53.7	805	2	US-09-543-681A-7900	Sequence 7900, Ap
705	29	53.7	421	2	US-09-002-567B-1	Sequence 1, Appl1	778	29	53.7	847	2	US-09-765-288A-10	Sequence 10, Appl
706	29	53.7	421	2	US-09-002-567B-3	Sequence 3, Appl1	779	29	53.7	869	2	US-10-314-048A-100	Sequence 100, App
707	29	53.7	421	2	US-09-571-347-1	Sequence 1, Appl1	780	29	53.7	900	2	US-09-949-016-7502	Sequence 7502, Ap
708	29	53.7	421	2	US-09-571-347-3	Sequence 3, Appl1	781	29	53.7	900	2	US-09-949-016-7502	Sequence 5323, Ap
709	29	53.7	421	2	US-09-949-016-6892	Sequence 6892, Ap	782	29	53.7	912	2	US-09-328-352-5323	Sequence 104, App
710	29	53.7	438	2	US-09-674-866A-6	Sequence 6, Appl1	783	29	53.7	926	2	US-10-314-048A-104	Sequence 8, Appl1
711	29	53.7	440	2	US-09-198-452A-1080	Sequence 1080, Ap	784	29	53.7	953	2	US-09-099-041A-8	Sequence 8, Appl1
712	29	53.7	440	2	US-09-438-185A-1009	Sequence 1009, Ap	785	29	53.7	953	2	US-09-245-281-8	Sequence 8, Appl1
713	29	53.7	441	2	US-09-107-532A-4623	Sequence 4623, Ap	786	29	53.7	953	2	US-09-207-359B-8	Sequence 8, Appl1
714	29	53.7	441	2	US-09-107-532A-4625	Sequence 4625, Ap	787	29	53.7	953	2	US-09-340-650A-8	Sequence 8, Appl1
715	29	53.7	442	2	US-09-248-796A-26457	Sequence 26457, A	788	29	53.7	953	2	US-09-865-364-8	Sequence 8, Appl1
716	29	53.7	460	2	US-09-198-452A-1085	Sequence 1085, Ap	789	29	53.7	953	2	US-09-728-721-8	Sequence 8, Appl1
717	29	53.7	460	2	US-09-540-236-3771	Sequence 3771, Ap	790	29	53.7	953	2	US-10-183-770A-4	Sequence 4, Appl1
718	29	53.7	460	2	US-09-438-917-17	Sequence 17, Appl	791	29	53.7	959	2	US-09-949-002-554	Sequence 524, App
719	29	53.7	463	2	US-09-949-016-10459	Sequence 10459, A	792	29	53.7	989	2	US-09-540-236-2137	Sequence 2137, Ap
720	29	53.7	472	2	US-09-438-185A-1014	Sequence 1014, Ap	793	29	53.7	1008	2	US-09-328-352-7403	Sequence 7403, Ap
721	29	53.7	486	2	US-09-252-991A-16751	Sequence 16751, A	795	29	53.7	1180	2	US-09-224-034-28	Sequence 28, Appl
722	29	53.7	486	2	US-09-734-237B-54	Sequence 54, Appl	796	29	53.7	1180	4	PCR-US94-07902-28	Sequence 28, Appl
723	29	53.7	487	2	US-09-734-237B-56	Sequence 56, Appl	797	29	53.7	1181	2	US-09-826-509-587	Sequence 587, App
724	29	53.7	487	2	US-09-734-237B-56	Sequence 26, Appl	798	29	53.7	1181	2	US-09-178-252-23	Sequence 23, Appl
725	29	53.7	490	2	US-09-099-041A-26	Sequence 26, Appl	799	29	53.7	1186	2	US-09-826-660-23	Sequence 8, Appl1
726	29	53.7	490	2	US-09-245-281-26	Sequence 26, Appl	800	29	53.7	1227	1	US-08-448-1170-8	Sequence 9, Appl1
727	29	53.7	490	2	US-09-207-359B-26	Sequence 26, Appl	801	29	53.7	1227	2	US-08-961-803-9	Sequence 9, Appl1
728	29	53.7	490	2	US-09-340-620A-26	Sequence 26, Appl	802	29	53.7	1227	2	US-08-506-286B-14	Sequence 14, Appl
729	29	53.7	490	2	US-09-728-721-26	Sequence 26, Appl	803	29	53.7	1253	2	US-08-506-286B-21	Sequence 21, Appl
730	29	53.7	490	2	US-09-442-102-14	Sequence 14, Appl	804	29	53.7	1359	2	US-09-914-059B-1	Sequence 37, Appl
731	29	53.7	500	2	US-09-325-932A-149	Sequence 149, App	805	29	53.7	1590	2	US-09-617-059B-1	Sequence 1, Appl1
732	29	53.7	500	2	US-08-939-106-14	Sequence 14, Appl	806	29	53.7	1590	2	US-08-964-956-60	Sequence 60, Appl
733	29	53.7	501	2	US-09-442-102-14	Sequence 14, Appl	807	29	53.7	1608	2	US-08-658-136-5	Sequence 8, Appl1
734	29	53.7	501	2	US-09-252-991A-25784	Sequence 25784, A	808	29	53.7	1614	2	US-09-964-956-13	Sequence 13, Appl
735	29	53.7	513	2	US-09-489-039A-10924	Sequence 10924, A	809	29	53.7	1614	2	US-08-423-582-2	Sequence 2, Appl1
736	29	53.7	513	2	US-09-949-016-9616	Sequence 9616, Ap	810	29	53.7	1614	2	US-09-052-465-2	Sequence 2, Appl1
737	29	53.7	527	2	US-09-380-420C-17	Sequence 17, Appl	811	29	53.7	1788	1	US-08-962-284-2	Sequence 2, Appl1
738	29	53.7	542	2	US-09-899-642A-17	Sequence 17, Appl	812	29	53.7	1788	1	US-09-964-956-27	Sequence 27, Appl
739	29	53.7	542	2	US-09-899-642A-17	Sequence 17, Appl	813	29	53.7	1788	1	US-09-964-956-27	Sequence 25, Appl
740	29	53.7	558	1	US-08-656-177A-2	Sequence 12653, A	814	29	53.7	2814	2	US-09-964-956-27	Sequence 8, Appl1
741	29	53.7	558	1	US-08-656-177A-2	Sequence 2, Appl1	815	29	53.7	4302	2	US-09-052-465-8	Sequence 8, Appl1
742	29	53.7	558	1	US-08-656-177A-2	Sequence 2, Appl1	816	29	53.7	4302	2	US-08-422-582-8	Sequence 8, Appl1
743	29	53.7	560	2	US-09-949-016-6458	Sequence 6458, Ap	817	29	53.7	4302	2	US-08-460-751-2	Sequence 2, Appl1
744	29	53.7	560	2	US-09-949-016-6458	Sequence 3, Appl1	818	29	53.7	4303	1	US-09-479-467A-2	Sequence 2, Appl1
745	29	53.7	560	2	US-09-949-016-6458	Sequence 51, Appl	819	29	53.7	4303	2	US-09-655-160-2	Sequence 6, Appl1
746	29	53.7	560	2	US-09-949-016-6458	Sequence 5066, Ap	820	29	53.7	4339	2	US-09-052-465-6	Sequence 6, Appl1
747	29	53.7	622	2	US-09-328-352-4844	Sequence 4844, Ap	821	29	53.7	4339	2	US-08-422-582-6	Sequence 6, Appl1
748	29	53.7	625	2	US-09-543-681A-6669	Sequence 6669, Ap	822	29	53.7	4339	2		
749	29	53.7					823	29	53.7				
750	29	53.7					824	29	53.7				
751	29	53.7					825	29	53.7				
752	29	53.7					826	29	53.7				
753	29	53.7					827	29	53.7				
754	29	53.7					828	29	53.7				
755	29	53.7					829	29	53.7				
756	29	53.7					830	29	53.7				
757	29	53.7						29	53.7				

831	29	53.7	4339	2	US-09-052-262-6	Sequence 6, Appli	904	28	51.9	190	2	US-09-075-454-5	Sequence 5, Appli
832	26.5	52.8	446	2	US-09-328-352-6360	Sequence 6360, Ap	905	28	51.9	191	2	US-08-867-288A-24	Sequence 24, Appli
833	28	51.9	19	1	US-07-882-923-13	Sequence 13, Appli	906	28	51.9	192	1	US-09-370-950C-5	Sequence 5, Appli
834	28	51.9	32	1	US-08-361-920-3	Sequence 3, Appli	907	28	51.9	192	2	US-09-709-103-52	Sequence 52, Appli
835	28	51.9	32	1	US-08-361-920-9	Sequence 9, Appli	908	28	51.9	192	2	US-09-439-410A-52	Sequence 25, Appli
836	28	51.9	32	1	US-08-479-939-3	Sequence 9, Appli	909	28	51.9	192	2	US-10-418-036-25	Sequence 27, Appli
837	28	51.9	32	1	US-08-479-939-9	Sequence 9, Appli	910	28	51.9	192	2	US-10-418-036-25	Sequence 27, Appli
838	28	51.9	32	1	US-08-483-432-3	Sequence 3, Appli	911	28	51.9	192	2	US-10-418-036-25	Sequence 27, Appli
839	28	51.9	32	1	US-08-483-432-9	Sequence 9, Appli	912	28	51.9	197	1	US-07-914-284A-8	Sequence 8, Appli
840	28	51.9	43	1	US-08-179-481-83	Sequence 83, Appli	913	28	51.9	197	2	US-09-252-991A-17035	Sequence 17035, A
841	28	51.9	51	2	US-09-439-410A-97	Sequence 97, Appli	914	28	51.9	200	2	US-09-328-352-6898	Sequence 6898, Ap
842	28	51.9	54	2	US-09-405-258-560	Sequence 560, App	915	28	51.9	204	2	US-09-949-016-8906	Sequence 8906, Ap
843	28	51.9	54	2	US-10-004-860-560	Sequence 560, App	916	28	51.9	205	2	US-09-949-016-8906	Sequence 19037, A
844	28	51.9	60	2	US-09-328-352-8216	Sequence 8216, Ap	917	28	51.9	211	2	US-10-418-036-24	Sequence 24, Appli
845	28	51.9	60	2	US-09-513-999C-4636	Sequence 4636, Ap	918	28	51.9	212	2	US-09-582-379-2	Sequence 3, Appli
846	28	51.9	61	2	US-09-543-681A-4688	Sequence 4688, Ap	919	28	51.9	212	2	US-09-582-379-3	Sequence 3, Appli
847	28	51.9	61	2	US-09-676-519-33	Sequence 33, Appli	920	28	51.9	227	2	US-08-911-853-23	Sequence 23, Appli
848	28	51.9	72	2	US-09-370-767-6119	Sequence 6119, A	921	28	51.9	227	2	US-08-479-409-23	Sequence 23, Appli
849	28	51.9	80	2	US-09-107-532A-4023	Sequence 4023, Ap	922	28	51.9	227	2	US-09-479-453-23	Sequence 23, Appli
850	28	51.9	81	2	US-09-270-767-46160	Sequence 46160, A	923	28	51.9	227	2	US-09-270-767-33085	Sequence 33085, A
851	28	51.9	82	2	US-09-621-976-4669	Sequence 4669, Ap	924	28	51.9	227	2	US-09-270-767-53195	Sequence 53195, A
852	28	51.9	87	2	US-09-370-767-45829	Sequence 45829, A	925	28	51.9	235	2	US-09-270-767-53195	Sequence 19616, A
853	28	51.9	90	2	US-09-188-930-134	Sequence 134, App	926	28	51.9	235	2	US-09-248-796A-19616	Sequence 3, Appli
854	28	51.9	90	2	US-09-312-283C-134	Sequence 134, App	927	28	51.9	240	2	US-09-978-248A-3	Sequence 4, Appli
855	28	51.9	100	2	US-09-312-283C-134	Sequence 134, App	928	28	51.9	240	2	US-09-978-248A-4	Sequence 13053, A
856	28	51.9	101	2	US-09-270-767-57683	Sequence 57683, A	929	28	51.9	241	2	US-09-902-540-15053	Sequence 8331, Ap
857	28	51.9	108	2	US-08-959-212-10	Sequence 10, Appli	930	28	51.9	242	2	US-09-489-038A-8331	Sequence 998, App
858	28	51.9	112	2	US-09-370-767-31687	Sequence 31687, A	931	28	51.9	251	2	US-09-710-279-298	Sequence 722, App
859	28	51.9	112	2	US-09-370-767-46904	Sequence 46904, A	932	28	51.9	251	2	US-09-710-279-722	Sequence 30900, A
860	28	51.9	118	2	US-09-605-703B-2026	Sequence 2026, Ap	933	28	51.9	252	2	US-09-328-352-5430	Sequence 5430, Ap
861	28	51.9	122	2	US-09-270-767-46747	Sequence 46747, A	934	28	51.9	252	2	US-09-328-352-5430	Sequence 32758, A
862	28	51.9	125	2	US-09-513-999C-5957	Sequence 5957, Ap	935	28	51.9	258	2	US-09-828-44-13	Sequence 13, Appli
863	28	51.9	127	2	US-09-199-637A-275	Sequence 275, App	936	28	51.9	258	2	US-09-828-44-13	Sequence 14988, A
864	28	51.9	134	2	US-09-270-767-38232	Sequence 38232, A	937	28	51.9	259	2	US-09-522-714-18	Sequence 4, Appli
865	28	51.9	134	2	US-09-270-767-53449	Sequence 53449, A	938	28	51.9	260	2	US-09-248-796A-14988	Sequence 4, Appli
866	28	51.9	135	2	US-09-513-999C-7880	Sequence 7880, Ap	939	28	51.9	263	1	US-08-809-267-4	Sequence 10, Appli
867	28	51.9	136	2	US-09-548-119A-21974	Sequence 21974, A	940	28	51.9	263	4	PCT-US95-13662A-4	Sequence 10, Appli
868	28	51.9	139	2	US-09-134-000C-6196	Sequence 6196, Ap	941	28	51.9	266	1	US-08-812-082-10	Sequence 10, Appli
869	28	51.9	148	2	US-09-134-000C-6196	Sequence 6196, Ap	942	28	51.9	266	1	US-07-791-931-10	Sequence 10, Appli
870	28	51.9	150	2	US-09-543-681A-7974	Sequence 7974, Ap	943	28	51.9	266	2	US-09-138-873A-10	Sequence 11163, A
871	28	51.9	155	2	US-09-522-714-26	Sequence 26, Appli	944	28	51.9	267	2	US-09-949-016-11163	Sequence 11164, A
872	28	51.9	157	2	US-10-012-331A-356	Sequence 356, App	945	28	51.9	267	2	US-09-949-016-11164	Sequence 45815, A
873	28	51.9	157	2	US-10-015-389A-356	Sequence 356, App	946	28	51.9	276	2	US-09-270-767-45815	Sequence 13255, A
874	28	51.9	157	2	US-10-006-768A-356	Sequence 356, App	947	28	51.9	276	2	US-09-489-038A-13235	Sequence 6, Appli
875	28	51.9	157	2	US-10-015-671A-356	Sequence 356, App	948	28	51.9	280	2	US-09-892-858B-6	Sequence 3069, Ap
876	28	51.9	157	2	US-10-015-671A-356	Sequence 356, App	949	28	51.9	280	2	US-10-104-047-3069	Sequence 10, Appli
877	28	51.9	157	2	US-10-011-833A-356	Sequence 356, App	950	28	51.9	284	1	US-08-411-777-10	Sequence 10, Appli
878	28	51.9	157	2	US-10-006-768A-356	Sequence 356, App	951	28	51.9	284	1	US-09-057-088-10	Sequence 6, Appli
879	28	51.9	157	2	US-10-012-064A-356	Sequence 356, App	952	28	51.9	284	2	US-09-230-228B-6	Sequence 3, Appli
880	28	51.9	163	2	US-09-387-286-13	Sequence 13, Appli	953	28	51.9	285	2	US-09-254-733-3	Sequence 3571, Ap
881	28	51.9	168	1	US-08-176-620A-10	Sequence 10, Appli	954	28	51.9	286	2	US-09-134-001C-3571	Sequence 38618, A
882	28	51.9	168	1	US-08-461-985-10	Sequence 10, Appli	955	28	51.9	286	2	US-09-270-767-38618	Sequence 53835, A
883	28	51.9	168	1	US-08-932-787B-18	Sequence 18, Appli	956	28	51.9	289	2	US-09-270-767-53835	Sequence 16473, A
884	28	51.9	168	2	US-08-932-012C-18	Sequence 18, Appli	957	28	51.9	289	2	US-09-270-767-53835	Sequence 20, Appli
885	28	51.9	168	2	US-08-888-818C-18	Sequence 18, Appli	958	28	51.9	289	2	US-09-270-767-53835	Sequence 24, Appli
886	28	51.9	172	2	US-09-100-391-7	Sequence 7, Appli	959	28	51.9	289	2	US-09-270-767-53835	Sequence 24, Appli
887	28	51.9	172	2	US-09-616-614-7	Sequence 7, Appli	960	28	51.9	293	2	US-08-651-136C-20	Sequence 4, Appli
888	28	51.9	172	2	US-10-288-273-7	Sequence 7, Appli	961	28	51.9	293	2	US-08-651-136C-20	Sequence 18, Appli
889	28	51.9	173	2	US-09-270-767-34680	Sequence 34680, A	962	28	51.9	293	2	US-10-007-521-20	Sequence 18, Appli
890	28	51.9	173	2	US-09-270-767-49897	Sequence 49897, A	963	28	51.9	294	2	US-08-651-136C-24	Sequence 24, Appli
891	28	51.9	177	2	US-09-540-236-1956	Sequence 6, Appli	964	28	51.9	294	2	US-10-007-521-24	Sequence 4, Appli
892	28	51.9	178	2	US-09-100-391-6	Sequence 6, Appli	965	28	51.9	297	2	US-08-651-136C-4	Sequence 4, Appli
893	28	51.9	178	2	US-09-616-614-6	Sequence 6, Appli	966	28	51.9	297	2	US-10-007-521-4	Sequence 4, Appli
894	28	51.9	178	2	US-10-288-273-6	Sequence 6, Appli	967	28	51.9	297	2	US-09-229-911A-4	Sequence 18, Appli
895	28	51.9	179	2	US-09-270-767-57319	Sequence 57319, A	968	28	51.9	298	2	US-08-651-136C-18	Sequence 18, Appli
896	28	51.9	181	2	US-09-176-620A-8	Sequence 61102, A	969	28	51.9	298	2	US-09-229-911A-18	Sequence 18, Appli
897	28	51.9	183	1	US-08-461-985-8	Sequence 8, Appli	970	28	51.9	299	2	US-10-007-521-18	Sequence 2, Appli
898	28	51.9	183	1	US-08-461-985-8	Sequence 8, Appli	971	28	51.9	299	2	US-09-631-548-2	Sequence 2, Appli
899	28	51.9	183	1	US-08-932-787B-16	Sequence 16, Appli	972	28	51.9	303	2	US-09-270-767-43614	Sequence 3897, Ap
900	28	51.9	183	2	US-08-932-012C-16	Sequence 16, Appli	973	28	51.9	303	2	US-10-104-047-3897	Sequence 10, Appli
901	28	51.9	183	2	US-08-888-818C-16	Sequence 16, Appli	974	28	51.9	303	2	US-09-982-616-10	Sequence 72, Appli
902	28	51.9	187	2	US-09-248-796A-14589	Sequence 14589, A	975	28	51.9	304	2	US-09-189-060B-72	Sequence 72, Appli
903	28	51.9	189	2	US-09-543-681A-7932	Sequence 7932, Ap	976	28	51.9	304	2	US-09-189-060B-72	Sequence 72, Appli

977 28 51.9 304 2 US-09-248-796A-15524
978 28 51.9 305 1 US-08-090-013-2
979 28 51.9 305 1 US-08-081-328-2
980 28 51.9 305 1 US-08-232-249-2
981 28 51.9 305 1 US-08-921-426-8
982 28 51.9 305 1 US-08-833-642A-2
983 28 51.9 305 1 US-08-140-008A-4
984 28 51.9 305 1 US-08-836-340-1
985 28 51.9 305 1 US-08-389-423-2
986 28 51.9 305 2 US-08-816-915-8
987 28 51.9 305 2 US-09-230-222-1
988 28 51.9 305 2 US-09-189-060B-56
989 28 51.9 305 2 US-09-230-665-2
990 28 51.9 305 2 US-09-189-028-2
991 28 51.9 305 4 PCT-US935-07743-8
992 28 51.9 306 2 US-09-189-060B-66
993 28 51.9 306 2 US-09-189-060B-68
994 28 51.9 306 2 US-09-543-681A-7494
995 28 51.9 307 2 US-09-189-060B-74
996 28 51.9 308 2 US-08-651-136C-6
997 28 51.9 308 2 US-09-189-060B-70
998 28 51.9 308 2 US-09-229-911A-6
999 28 51.9 308 2 US-09-543-681A-4572
1000 28 51.9 308 2 US-10-007-521-6

ALIGNMENTS

RESULT 1
US-08-934-915-44
Sequence 44, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. FOUTCH
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid

Sequence 15524, A
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 8, Appli
Sequence 2, Appli
Sequence 4, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 8, Appli
Sequence 56, Appli
Sequence 2, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 74, Appli
Sequence 70, Appli
Sequence 6, Appli
Sequence 4572, Ap
Sequence 6, Appli

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-44

Query Match 100.0%; Score 54; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
DB 3 KISEYRHYC 11

RESULT 2
US-08-934-915-163
Sequence 163, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. FOUTCH
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 163:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-163

Query Match 100.0%; Score 54; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
DB 3 KISEYRHYC 11

RESULT 3
US-09-980-523A-2
Sequence 2, Application US/09980523A

Patent No. 6783763
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCES
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: WO/01/01513
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR 99/07012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 158
TYPE: PRT
ORGANISM: Human Papillomavirus
US-09-980-523A-2

Query Match 100.0%; Score 54; DB 2; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.035;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
DB 79 KISEYRHYC 87

RESULT 4
US-08-316-239B-3
Sequence 3, Application US/08316239B
Patent No. 5679509
GENERAL INFORMATION:
APPLICANT: Wheeler, Cosette M.
APPLICANT: Parmenter, Cheryl A.
TITLE OF INVENTION: Methods and a Diagnostic Aid for
TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated with an
TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia and
TITLE OF INVENTION: Cervical Cancer
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jagtiani & Associates
STREET: 6126 Rocky Way Court
CITY: Centreville
STATE: VA
COUNTRY: USA
ZIP: 20120-3400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UNME-0001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
TELEFAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
TYPE: amino acid

STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: Protein
HYPOTHETICAL: NO
US-08-316-239B-3

Query Match 100.0%; Score 54; DB 1; Length 162;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
DB 79 KISEYRHYC 87

RESULT 5
US-08-316-239B-4
Sequence 4, Application US/08316239B
Patent No. 5679509
GENERAL INFORMATION:
APPLICANT: Wheeler, Cosette M.
APPLICANT: Parmenter, Cheryl A.
TITLE OF INVENTION: Methods and a Diagnostic Aid for
TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated with an
TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia and
TITLE OF INVENTION: Cervical Cancer
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jagtiani & Associates
STREET: 6126 Rocky Way Court
CITY: Centreville
STATE: VA
COUNTRY: USA
ZIP: 20120-3400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UNME-0001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
TELEFAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-316-239B-4

Query Match 100.0%; Score 54; DB 1; Length 162;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
DB 79 KISEYRHYC 87

RESULT 6
US-08-860-165-12
Sequence 12, Application US/08860165A
Patent No. 6004557


```

; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-12

Query Match          100.0%; Score 54; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.038;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 17 KISEYRHYC 25

RESULT 7
US-08-860-165-14
; Sequence 14, Application US/08860165A
; Patent No. 6004557
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-14

Query Match          100.0%; Score 54; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.038;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 148 KISEYRHYC 156

RESULT 8
US-09-359-382-12
; Sequence 12, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; EARLIER FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-12

Query Match          100.0%; Score 54; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.038;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 17 KISEYRHYC 25

RESULT 9
US-09-359-382-14
; Sequence 14, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; EARLIER FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-14

Query Match          100.0%; Score 54; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.038;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 148 KISEYRHYC 156

RESULT 10
US-09-462-993-1
; Sequence 1, Application US/09462993
; Patent No. 6884786
; GENERAL INFORMATION:
; APPLICANT: KIEVY, Marie-Paule
```

```

; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; EARLIER FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-12

Query Match          100.0%; Score 54; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.038;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 17 KISEYRHYC 25

RESULT 9
US-09-359-382-14
; Sequence 14, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; EARLIER FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-14

Query Match          100.0%; Score 54; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.038;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 148 KISEYRHYC 156

RESULT 10
US-09-462-993-1
; Sequence 1, Application US/09462993
; Patent No. 6884786
; GENERAL INFORMATION:
; APPLICANT: KIEVY, Marie-Paule
```



```

; APPLICANT: BALLOU, Jean-Marc
; APPLICANT: BIZOUARNE, Nadine
; TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
; FILE OF INVENTION: POLYPEPTIDE WITH MODIFIED CELL LOCATION
; FILE REFERENCE: 017753-122
; CURRENT APPLICATION NUMBER: US/09/462,993
; PRIOR FILING DATE: 2000-04-17
; PRIOR APPLICATION NUMBER: PCT/FR98/01576
; PRIOR FILING DATE: 1998-07-17
; PRIOR APPLICATION NUMBER: FR 97/09152
; PRIOR FILING DATE: 1997-07-18
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.2
; SEQ ID NO 1
; LENGTH: 243
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Derived from
; OTHER INFORMATION: human papillomavirus, strain HPV-16, E6 protein
; OTHER INFORMATION: fused F protein signals, clone E6*TMF.
US-09-462-993-1

```

```

Query Match          100.0%; Score 54; DB 2; Length 243;
Best Local Similarity 100.0%; Pred. No. 0.053;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 KISEYRHYC 9
Db 107 KISEYRHYC 115

```

```

RESULT 11
US-08-860-165-10
; Sequence 10, Application US/08860165A
; Patent No. 6004557
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; CURRENT FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PNO157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-10

```

```

Query Match          100.0%; Score 54; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 KISEYRHYC 9
Db 79 KISEYRHYC 87

```

```

RESULT 12
US-09-359-382-10
; Sequence 10, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:

```

```

; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; CURRENT FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PNO157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-10

```

```

Query Match          100.0%; Score 54; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 KISEYRHYC 9
Db 79 KISEYRHYC 87

```

```

RESULT 13
US-09-367-309A-1
; Sequence 1, Application US/09367309A
; Patent No. 6428807
; GENERAL INFORMATION:
; APPLICANT: MACFARLAN, RODERICK I.
; APPLICANT: MALLIAROS, JIM
; TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
; FILE REFERENCE: 017227/0149
; CURRENT APPLICATION NUMBER: US/09/367,309A
; CURRENT FILING DATE: 1999-08-11
; PRIOR APPLICATION NUMBER: PCT/AU98/00080
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: AU PO 5178
; PRIOR FILING DATE: 1997-02-19
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

```

```

Query Match          100.0%; Score 54; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 KISEYRHYC 9
Db 79 KISEYRHYC 87

```

```

RESULT 14
US-09-485-885-4
; Sequence 4, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: BRUCK, Claudine
; APPLICANT: CABEZON SILVA, Teresa
; APPLICANT: DELISSE, Anne-Marie Eva
; APPLICANT: GERARD, Catherine Marie Ghislaine
; APPLICANT: LOMBARDO-BENCHEIKH, Angela

```

```

; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-485-885-4

Query Match          100.0%; Score 54; DB 2; Length 273;
Best Local Similarity 100.0%; Pred. No. 0.06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 KISEYRHYC 9
        |||||
Db       185 KISEYRHYC 193

RESULT 15
US-09-485-885-10
; Sequence 10, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Chislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-485-885-10

Query Match          100.0%; Score 54; DB 2; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 KISEYRHYC 9
        |||||
Db       204 KISEYRHYC 212

RESULT 16
US-09-485-885-6
; Sequence 6, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Chislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
```

```

; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-485-885-6

Query Match          100.0%; Score 54; DB 2; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 KISEYRHYC 9
        |||||
Db       185 KISEYRHYC 193

RESULT 17
US-09-485-885-14
; Sequence 14, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Chislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 390
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-485-885-14

Query Match          100.0%; Score 54; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.085;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 KISEYRHYC 9
        |||||
Db       204 KISEYRHYC 212

RESULT 18
US-08-159-339A-76
; Sequence 76, Application US/08159339A
; Patent No. 6037135
; GENERAL INFORMATION:
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Sette, Alessandro
; APPLICANT: Celis, Esteban
; TITLE OF INVENTION: HLA Binding peptides and Their
; NUMBER OF SEQUENCES: 1254
; CORRESPONDENCE ADDRESS:
; ADDRESS: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
```

```
/ STATE: CA
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FASTSEQ for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/159,339A
/ FILING DATE: 29-NOV-1993
/ CLASSIFICATION: 424
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 07/926,666
/ FILING DATE: 07-AUG-1992
/ APPLICATION NUMBER: US 08/027,746
/ FILING DATE: 05-MAR-1993
/ APPLICATION NUMBER: US 08/103,396
/ FILING DATE: 06-AUG-1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Weber, Ellen Lauver
/ REGISTRATION NUMBER: 32,762
/ REFERENCE/DOCKET NUMBER: 018623-005030US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 76:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 9 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ US-08-159-339A-76

Query Match          90.7%; Score 49; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches      8; Conservative      0; Mismatches      0; Indels      0; Gaps      0;

QY      2 ISEYRHYC 9
DB      1 ISEYRHYC 8

RESULT 19
/ US-09-601-729-277
/ Sequence 277, Application US/09601729
/ Patent No. 6683052
/ GENERAL INFORMATION:
/ APPLICANT: THIAM, KADER
/ APPLICANT: AURIAULT, CLAUDE
/ APPLICANT: GRAS-MASSIE HELENE
/ APPLICANT: LOING, ESTELLE
/ APPLICANT: VERMARDE, CLAUDIE
/ APPLICANT: GUILLET, JEAN GERARD
/ TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USBS
/ TITLE OF INVENTION: THEREOF IN PHARMACEUTICAL COMPOSITIONS
/ FILE REFERENCE: USB-97-RU-IN
/ CURRENT APPLICATION NUMBER: US/09/601,729
/ CURRENT FILING DATE: 2000-11-20
/ PRIOR APPLICATION NUMBER: PCT/FR99/00259
/ PRIOR FILING DATE: 1999-02-05
/ PRIOR APPLICATION NUMBER: 98 01439
/ PRIOR FILING DATE: 1998-02-06
/ NUMBER OF SEQ ID NOS: 281
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 277
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
```

```
/ OTHER INFORMATION: peptide
/ US-09-601-729-277

Query Match          90.7%; Score 49; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches      8; Conservative      0; Mismatches      0; Indels      0; Gaps      0;

QY      2 ISEYRHYC 9
DB      1 ISEYRHYC 8

RESULT 20
/ US-09-980-523A-8
/ Sequence 8, Application US/09980523A
/ Patent No. 6783763
/ GENERAL INFORMATION:
/ APPLICANT: CHOPEIN, JEANNINE
/ APPLICANT: BOURGAULT VILLADA, ISABELLE
/ APPLICANT: GUILLET, JEAN-GERARD
/ APPLICANT: CONNAN, FRANCINE
/ APPLICANT: FERRIES, ESTELLE
/ TITLE OF INVENTION: POLYPEPTOPIC PROTEIN FRAGMENTS OF THE E6 AND E7
/ TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
/ FILE REFERENCE: WO81 AO INS
/ CURRENT APPLICATION NUMBER: US/09/980,523A
/ CURRENT FILING DATE: 2002-04-29
/ PRIOR APPLICATION NUMBER: PCT/FR00/01513
/ PRIOR FILING DATE: 2000-05-31
/ PRIOR APPLICATION NUMBER: FR 99/07012
/ PRIOR FILING DATE: 1999-06-03
/ NUMBER OF SEQ ID NOS: 24
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 8
/ LENGTH: 29
/ TYPE: PRT
/ ORGANISM: Human Papillomavirus
/ US-09-980-523A-8

Query Match          90.7%; Score 49; DB 2; Length 29;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches      8; Conservative      0; Mismatches      0; Indels      0; Gaps      0;

QY      2 ISEYRHYC 9
DB      1 ISEYRHYC 8

RESULT 21
/ US-09-701-080C-18
/ Sequence 18, Application US/09701080C
/ Patent No. 6864054
/ GENERAL INFORMATION:
/ APPLICANT: INSTITUTE OF MOLECULAR AND CELL BIOLOGY
/ TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING PROTEIN AND RELATED PROTEIN P300
/ TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION
/ FILE REFERENCE: N73477C GCM
/ CURRENT APPLICATION NUMBER: US/09/701,080C
/ CURRENT FILING DATE: 2001-02-27
/ PRIOR APPLICATION NUMBER: GB 9811303.8
/ PRIOR FILING DATE: 1998-05-26
/ PRIOR APPLICATION NUMBER: GB 9900157.0
/ PRIOR FILING DATE: 1999-01-05
/ NUMBER OF SEQ ID NOS: 36
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 18
/ LENGTH: 151
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
/ US-09-701-080C-18

Query Match          90.7%; Score 49; DB 2; Length 151;
```

Best Local Similarity 88.9%; Pred. No. 0.25;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 KISEYRHYC 9
Db 72 KISEYRHYC 80

RESULT 22
US-08-117-083-10
; Sequence 10, Application US/08117083
; Patent No. 5719054
; GENERAL INFORMATION:
; APPLICANT: Bourneil, Michael E.
; APPLICANT: Ingils, Stephen C.
; APPLICANT: Munro, Alan J.
; TITLE OF INVENTION: Recombinant Virus Vectors Encoding Human
; TITLE OF INVENTION: Papilloma Virus Proteins
; NUMBER OF SEQUENCES: 70
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Walter H. Dreger
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/117,083
; FILING DATE: 10-SEP-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Dreger, Walter H.
; REGISTRATION NUMBER: 24,190
; REFERENCE/DOCKET NUMBER: A-58783
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-781-1989
; TELEFAX: 415-398-3249
; TELEX: 910 277299
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 182 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..182
; OTHER INFORMATION: /note="Xaa refers to stop codon in
; the open reading frame."
US-08-117-083-10

Query Match 90.7%; Score 49; DB 1; Length 182;
Best Local Similarity 100.0%; Pred. No. 0.3;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 ISEYRHYC 9
Db 61 ISEYRHYC 68

RESULT 23
US-08-159-339A-234
; Sequence 234, Application US/08159339A
; Patent No. 6037135
; GENERAL INFORMATION:
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.

APPLICANT: Sette, Alessandro
; APPLICANT: Celis, Esben
; TITLE OF INVENTION: HLA Binding peptides and Their
; TITLE OF INVENTION: Uses
; NUMBER OF SEQUENCES: 1254
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/159,339A
; FILING DATE: 29-NOV-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/926,666
; FILING DATE: 07-AUG-1992
; APPLICATION NUMBER: US 08/027,746
; FILING DATE: 05-MAR-1993
; APPLICATION NUMBER: US 08/103,396
; FILING DATE: 06-AUG-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Ellen Lauver
; REGISTRATION NUMBER: 32,762
; REFERENCE/DOCKET NUMBER: 018623-005030US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; TELEX:
; INFORMATION FOR SEQ ID NO: 234:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-159-339A-234

Query Match 83.3%; Score 45; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KISEYRHY 8
Db 1 KISEYRHY 8

RESULT 24
US-08-159-339A-75
; Sequence 75, Application US/08159339A
; Patent No. 6037135
; GENERAL INFORMATION:
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Sette, Alessandro
; APPLICANT: Celis, Esben
; TITLE OF INVENTION: HLA Binding peptides and Their
; TITLE OF INVENTION: Uses
; NUMBER OF SEQUENCES: 1254
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111-3834

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
TELEX:
INFORMATION FOR SEQ ID NO: 75:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-159-339A-75
```

```
Query Match      83.3%: Score 45; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.087;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHY 8
        |||||
Db       3 KISEYRHY 10
```

```
RESULT 25
US-09-454-071-6
Sequence 6, Application US/09454071
Patent No. 6673596
GENERAL INFORMATION:
APPLICANT: Saylor, Gary S.
APPLICANT: Simpson, Michael L.
APPLICANT: Applegate, Bruce M.
APPLICANT: Ridd, Steven A.
TITLE OF INVENTION: IN VIVO BIOSENSOR APPARATUS AND METHOD OF USE
FILE REFERENCE: 4310, 004300
CURRENT APPLICATION NUMBER: US/09/454,071
CURRENT FILING DATE: 1999-12-02
EARLIER APPLICATION NUMBER: 60/110,684
EARLIER FILING DATE: 1998-12-02
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 370
TYPE: PRT
ORGANISM: Xenorhabdus luminescens
US-09-454-071-6
```

```
Query Match      75.9%: Score 41; DB 2; Length 370;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4 EYRHYC 9
        |||||
Db       54 EYRHYC 59
```

```
RESULT 26
US-08-159-339A-134
Sequence 134, Application US/08159339A
Patent No. 6037135
GENERAL INFORMATION:
APPLICANT: Kubo, Ralph T.
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esteban
TITLE OF INVENTION: HLA Binding peptides and Their
TITLE OF INVENTION: Uses
NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESS: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
TELEX:
INFORMATION FOR SEQ ID NO: 134:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-159-339A-134
```

```
Query Match      74.1%: Score 40; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHY 8
        |||||
Db       1 ISEYRHY 7
```

```
RESULT 27
US-09-149-476-640
Sequence 640, Application US/09149476
Patent No. 6420526
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 186 Human Secreted proteins
FILE REFERENCE: P2002P1
CURRENT APPLICATION NUMBER: US/09/149,476
CURRENT FILING DATE: 1998-09-08
EARLIER APPLICATION NUMBER: PCT/US98/04493
```

[illegible]

EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,589
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,593
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,576
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/047,501
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,670
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/056,632
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,664
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,876
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,881
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,909
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,875
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,862
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,887
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,908
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/048,964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057,650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056,884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

Query Match 70.4%; Score 38; DB 2; Length 28;
Best Local Similarity 75.0%; Pred. No. 4.1;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
|||
Db 4 ISOLRHYC 11

RESULT 28

US-09-270-767-33888
Sequence 33888, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 33888
LENGTH: 124
TYPE: PRT
ORGANISM: Drosophila melanogaster
FEATURE:
OTHER INFORMATION: Xaa means any amino acid

US-09-270-767-33888

Query Match 68.5%; Score 37; DB 2; Length 124;
Best Local Similarity 75.0%; Pred. No. 27;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
|||
Db 56 IYETHYHC 63

RESULT 29

US-09-489-039A-13995
Sequence 13995, Application US/09489039A
Patent No. 6610836
GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
FILE REFERENCE: 2709.2004001
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 13995
LENGTH: 169
TYPE: PRT
ORGANISM: Klebsiella pneumoniae
US-09-489-039A-13995

Query Match 66.7%; Score 36; DB 2; Length 169;
Best Local Similarity 83.3%; Pred. No. 55;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHHC 9
|||
Db 83 EYRHHC 88

RESULT 30

US-09-134-000C-3467
Sequence 3467, Application US/09134000C
Patent No. 6617156
GENERAL INFORMATION:
APPLICANT: Lynda Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
FILE REFERENCE: 032796-032
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTWARE: Patentin version 3.1
SEQ ID NO 3467
LENGTH: 238
TYPE: PRT
ORGANISM: Enterococcus faecalis
US-09-134-000C-3467

Query Match 66.7%; Score 36; DB 2; Length 238;
Best Local Similarity 85.7%; Pred. No. 77;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHYC 8
|||
Db 36 ISEYRHYC 42

RESULT 31

US-09-328-352-7708
Sequence 7708, Application US/09328352

Patent No. 6562958
GENERAL INFORMATION:
APPLICANT: Gary L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
FILE REFERENCE: GTC99-03PA
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
NUMBER OF SEQ ID NOS: 8252
SEQ ID NO 7708
LENGTH: 478
TYPE: PRT
ORGANISM: Acinetobacter baumannii
US-09-328-352-7708

Query Match 66.7%; Score 36; DB 2; Length 478;
Best Local Similarity 83.3%; Pred. No. 1.5e+02;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 EYRHYC 9
Db 96 EYRHYC 101

RESULT 32
US-09-926-820-1
Sequence 1, Application US/09926820
Patent No. 6939851
GENERAL INFORMATION:
APPLICANT: FORSMANN, WOLF-GEORG
APPLICANT: MAGERT, HANS-JURGEN
APPLICANT: STANDKER, LUDGER
APPLICANT: KREUTZMANN, PETER
TITLE OF INVENTION: SERINE PROTEASE INHIBITORS
FILE REFERENCE: 10496-P67431USO
CURRENT APPLICATION NUMBER: US/09/926,820
CURRENT FILING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: PCT/EP99/04331
PRIOR FILING DATE: 1999-06-22
NUMBER OF SEQ ID NOS: 12
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 1064
TYPE: PRT
ORGANISM: mammalian
US-09-926-820-1

Query Match 66.7%; Score 36; DB 2; Length 1064;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 SEYRHY 8
Db 568 SEYRHY 573

RESULT 33
US-08-286-819A-28
Sequence 28, Application US/08286819A
Patent No. 5871910
GENERAL INFORMATION:
APPLICANT: ARTHUR, MICHEL
APPLICANT: DUKTA-MALEN, SYLVIE
APPLICANT: MOLINAS, CATHERINE
APPLICANT: COURVALIN, PATRICE
TITLE OF INVENTION: POLYPEPTIDES IMPLICATED IN THE
TITLE OF INVENTION: EXPRESSION OF RESISTANCE TO GLYCOPOLYMERES, IN PARTICULAR
TITLE OF INVENTION: IN GRAM-POSITIVE BACTERIA, NUCLEOTIDE SEQUENCE CODING FOR
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
ADDRESS: P.C.

STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,819A
FILING DATE: 05-AUG-1994
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/174,682
FILING DATE: 28-DEC-1993
CLASSIFICATION: 435
APPLICATION NUMBER: US 07/917,146
FILING DATE: 10-AUG-1992

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/FR/91/00855
FILING DATE: 29-OCT-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 9013579
FILING DATE: 31-OCT-1990

ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5871910man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 660-060-0 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220

INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 2254 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

US-08-286-819A-28

Query Match 66.7%; Score 36; DB 1; Length 2254;
Best Local Similarity 83.3%; Pred. No. 7.2e+02;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
Db 1133 EYRHYC 1138

RESULT 34
US-08-980-357-28
Sequence 28, Application US/08980357
Patent No. 6013508
GENERAL INFORMATION:
APPLICANT: ARTHUR, MICHEL
APPLICANT: DUKTA-MALEN, SYLVIE
APPLICANT: MOLINAS, CATHERINE
APPLICANT: COURVALIN, PATRICE
TITLE OF INVENTION: POLYPEPTIDES IMPLICATED IN THE
TITLE OF INVENTION: EXPRESSION OF RESISTANCE TO GLYCOPOLYMERES, IN PARTICULAR
TITLE OF INVENTION: IN GRAM-POSITIVE BACTERIA, NUCLEOTIDE SEQUENCE CODING FOR
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESSEE: P.C.
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington

STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/980,357
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,819
FILING DATE: 05-AUG-1994
APPLICATION NUMBER: US 08/174,682
FILING DATE: 28-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/917,146
FILING DATE: 10-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/FR/91/00855
FILING DATE: 29-OCT-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 9013579
FILING DATE: 31-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 6013508man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 660-060-0 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 2254 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-980-357-28

Query Match 66.7%; Score 36; DB 2; Length 2254;
Best Local Similarity 83.3%; Pred. No. 7.2e+02;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
DB 1133 EHRHYC 1138

RESULT 35
US-09-357-375-28
Sequence 28, Application US/09357375
Patent No. 6916906
GENERAL INFORMATION:
APPLICANT: ARTHUR, MICHEL
APPLICANT: DIKITA-MALEN, SYLVIE
APPLICANT: MOULINS, CATHERINE
APPLICANT: COURVALIN, PATRICE
TITLE OF INVENTION: POLYPEPTIDES IMPLICATED IN THE
EXPRESSION OF RESISTANCE TO GLYCOPROTEINS, IN PARTICULAR
TITLE OF INVENTION: EXPRESSION OF RESISTANCE TO GLYCOPROTEINS, IN PARTICULAR
TITLE OF INVENTION: THESE POLYPEPTIDES AND USE FOR DIAGNOSIS
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
ADDRESS: P.C.
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
ZIP: 22202

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/357,375
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/286,819
FILING DATE: 05-AUG-1994
APPLICATION NUMBER: US 08/174,682
FILING DATE: 28-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/917,146
FILING DATE: 10-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/FR/91/00855
FILING DATE: 29-OCT-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 9013579
FILING DATE: 31-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 6916906man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 660-060-0 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 2254 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-357-375-28

Query Match 66.7%; Score 36; DB 2; Length 2254;
Best Local Similarity 83.3%; Pred. No. 7.2e+02;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
DB 1133 EHRHYC 1138

RESULT 36
US-09-051-624A-3
Sequence 3, Application US/09051624A
Patent No. 6212288
GENERAL INFORMATION:
APPLICANT: Kojima, Itaru
TITLE OF INVENTION: COMPOSITION FOR IMPROVING PANCREATIC
FUNCTION
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
STREET: 130 Water Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/051,624A
FILING DATE: 15-APR-1998
CLASSIFICATION: 514

PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP96/03277
FILING DATE: 08-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: Lowen, Cara Z.
REGISTRATION NUMBER: 38,227
REFERENCE/DOCKET NUMBER: 48210
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEFAX: 617-523-6440
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-051-624A-3

Query Match 64.8%; Score 35; DB 2; Length 14;
Best Local Similarity 66.7%; Pred. No. 7;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 4 EYRHYC 9
: : : : :
Db 8 QYKHYC 13

RESULT 37
US-09-857-815B-58
Sequence 58, Application US/09857815B
Patent No. 6825165
GENERAL INFORMATION:
APPLICANT: Takeda Chemical Industries, Ltd.
TITLE OF INVENTION: Betacellulin Mutain
FILE REFERENCE: P2001-232
CURRENT APPLICATION NUMBER: US/09/857,815B
CURRENT FILING DATE: 2001-06-08
PRIOR APPLICATION NUMBER: JP 10-350377
PRIOR FILING DATE: 1998-12-09
PRIOR APPLICATION NUMBER: JP 11-55326
PRIOR FILING DATE: 1999-03-03
NUMBER OF SEQ ID NOS: 64
SEQ ID NO 58
LENGTH: 36
TYPE: PRT
ORGANISM: Human
US-09-857-815B-58

Query Match 64.8%; Score 35; DB 2; Length 36;
Best Local Similarity 66.7%; Pred. No. 18;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 4 EYRHYC 9
: : : : :
Db 1 QYKHYC 6

RESULT 38
US-09-857-815B-60
Sequence 60, Application US/09857815B
Patent No. 6825165
GENERAL INFORMATION:
APPLICANT: Takeda Chemical Industries, Ltd.
TITLE OF INVENTION: Betacellulin Mutain
FILE REFERENCE: P2001-232
CURRENT APPLICATION NUMBER: US/09/857,815B
CURRENT FILING DATE: 2001-06-08
PRIOR APPLICATION NUMBER: JP 10-350377
PRIOR FILING DATE: 1998-12-09
PRIOR APPLICATION NUMBER: JP 11-55326
PRIOR FILING DATE: 1999-03-03
NUMBER OF SEQ ID NOS: 64

SEQ ID NO 60
LENGTH: 39
TYPE: PRT
ORGANISM: Human
US-09-857-815B-60

Query Match 64.8%; Score 35; DB 2; Length 39;
Best Local Similarity 66.7%; Pred. No. 19;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 4 EYRHYC 9
: : : : :
Db 8 QYKHYC 13

RESULT 39
US-08-899-437-11
Sequence 11, Application US/08899437
Patent No. 6121415
GENERAL INFORMATION:
APPLICANT: Godowski, Paul J., Mark, Melanie Rose, Zhang, Dong Xiao
TITLE OF INVENTION: ErbB Receptor-Specific Neuregulin Related
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/899,437
FILING DATE: 24-Jul-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Conley, Delidre L.
REGISTRATION NUMBER: 36,487
REFERENCE/DOCKET NUMBER: P1084R1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-2066
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 45 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
FEATURE:
NAME/KEY: hB7C.eFg
LOCATION: 1-45
IDENTIFICATION METHOD:
OTHER INFORMATION:
US-08-899-437-11

Query Match 64.8%; Score 35; DB 2; Length 45;
Best Local Similarity 66.7%; Pred. No. 22;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 4 EYRHYC 9
: : : : :
Db 8 QYKHYC 13

RESULT 40
US-09-126-121-11
Sequence 11, Application US/09126121
Patent No. 6252051
GENERAL INFORMATION:

APPLICANT: Godowski, Paul J., Mark, Melanie Rose, Zhang, Dong Xiao
TITLE OF INVENTION: ErbB Receptor-Specific Neuregulin Related
TITLE OF INVENTION: Ligands and Uses Therefor
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/126,121
FILING DATE: 30-Jul-1998
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Conley, Delidre L.
REGISTRATION NUMBER: 36,487
REFERENCE/DOCKET NUMBER: P1084R1D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-2066
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 45 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
FEATURE:
NAME/KEY: hBTC.efg
LOCATION: 1-45
IDENTIFICATION METHOD:
OTHER INFORMATION:
US-09-126-121-11
Query Match 64.8%; Score 35; DB 2; Length 45;
Best Local Similarity 66.7%; Pred. No. 22;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 4 EYRHYC 9
:|:|:|
Db 8 QYKHYC 13
RESULT 41
US-08-915-096A-12
Sequence 12, Application US/08915096A
Patent No. 6265543
GENERAL INFORMATION:
APPLICANT: Weisner, Paul S.
APPLICANT: Fuldner, Rebecca A.
APPLICANT: Adams, Mark D.
TITLE OF INVENTION: Transforming Growth Factor Alpha HI
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
CITY: Rockville
STATE: MD
COUNTRY: USA
ZIP: 20850
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915,096A
FILING DATE: 20-AUG-1997

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/468,846
FILING DATE: 06-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,008
FILING DATE: 08-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Brookes, A. Anders
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: P110D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-309-8504
TELEX: 301-309-8439
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 46 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-915-096A-12
Query Match 64.8%; Score 35; DB 2; Length 46;
Best Local Similarity 66.7%; Pred. No. 23;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 4 EYRHYC 9
:|:|:|
Db 9 QYKHYC 14
RESULT 42
US-09-553-769-10
Sequence 10, Application US/09553769
Patent No. 6544759
GENERAL INFORMATION:
APPLICANT: Harari, Daniel
APPLICANT: Yarden, Yosef
TITLE OF INVENTION: NOVEL GROWTH FACTOR WHICH ACTS THROUGH ERBB-4 RECEPTOR TYROSINE K
FILE REFERENCE: 00/20522
CURRENT APPLICATION NUMBER: US/09/553,769
CURRENT FILING DATE: 2000-04-21
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
LENGTH: 46
TYPE: PRT
ORGANISM: Mus musculus
US-09-553-769-10
Query Match 64.8%; Score 35; DB 2; Length 46;
Best Local Similarity 66.7%; Pred. No. 23;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 4 EYRHYC 9
:|:|:|
Db 9 QYKHYC 14
RESULT 43
US-09-857-815B-4
Sequence 4, Application US/09857815B
Patent No. 6825165
GENERAL INFORMATION:
APPLICANT: Takeda Chemical Industries, Ltd.
TITLE OF INVENTION: Betacellulin Mucin
FILE REFERENCE: P2001-232
CURRENT APPLICATION NUMBER: US/09/857,815B
CURRENT FILING DATE: 2001-06-08
PRIOR APPLICATION NUMBER: JP 10-350377
PRIOR FILING DATE: 1998-12-09

;; PRIOR APPLICATION NUMBER: JP 11-55326
;; PRIOR FILING DATE: 1999-03-03
;; NUMBER OF SEQ ID NOS: 64
;; SEQ ID NO 4
;; LENGTH: 46
;; TYPE: PRT
;; ORGANISM: Human
US-09-857-815B-4

Query Match 64.8%; Score 35; DB 2; Length 46;
Best Local Similarity 66.7%; Pred. No. 23;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
: : : : :
Db 11 QYKHYC 16

RESULT 44
US-09-857-815B-3
; Sequence 3, Application US/09857815B
; Patent No. 6825165
; GENERAL INFORMATION:
; APPLICANT: Takeda Chemical Industries, Ltd.
; TITLE OF INVENTION: Betacellulin Mucin
; FILE REFERENCE: P2001-232
; CURRENT APPLICATION NUMBER: US/09/857,815B
; CURRENT FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: JP 11-550377
; PRIOR FILING DATE: 1998-12-09
; PRIOR APPLICATION NUMBER: JP 11-55326
; PRIOR FILING DATE: 1999-03-03
; NUMBER OF SEQ ID NOS: 64
; SEQ ID NO 3
; LENGTH: 47
; TYPE: PRT
; ORGANISM: Human
US-09-857-815B-3

Query Match 64.8%; Score 35; DB 2; Length 47;
Best Local Similarity 66.7%; Pred. No. 23;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
: : : : :
Db 11 QYKHYC 16

RESULT 45
US-09-857-815B-12
; Sequence 12, Application US/09857815B
; Patent No. 6825165
; GENERAL INFORMATION:
; APPLICANT: Takeda Chemical Industries, Ltd.
; TITLE OF INVENTION: Betacellulin Mucin
; FILE REFERENCE: P2001-232
; CURRENT APPLICATION NUMBER: US/09/857,815B
; CURRENT FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: JP 11-550377
; PRIOR FILING DATE: 1998-12-09
; PRIOR APPLICATION NUMBER: JP 11-55326
; PRIOR FILING DATE: 1999-03-03
; NUMBER OF SEQ ID NOS: 64
; SEQ ID NO 12
; LENGTH: 47
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: amino acid sequence of betacellulin mucin (BTC 31-76, 78)
US-09-857-815B-12

Query Match 64.8%; Score 35; DB 2; Length 47;
Best Local Similarity 66.7%; Pred. No. 23;

Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 4 EYRHYC 9
: : : : :
Db 11 QYKHYC 16

RESULT 46
US-08-465-794-3
; Sequence 3, Application US/08465794
; Patent No. 5886141
; GENERAL INFORMATION:
; APPLICANT: FOLKMAN, MOSES J.
; APPLICANT: SHING, YUEN
; APPLICANT: IGARASHI, KOICHI
; TITLE OF INVENTION: SMOOTH MUSCLE MITOGEN AND ISOLATED DNA
; TITLE OF INVENTION: CODING THEREFORE
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DAVID G. CONLIN, DIKE, BRONSTEIN, ROBERTS &
; ADDRESSEE: CUSHMAN
; STREET: 130 WATER STREET
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: US
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,794
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/007,126
; FILING DATE: 21-JAN-1993
; APPLICATION NUMBER: US 07/994,776
; FILING DATE: 22-DEC-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/872,597
; FILING DATE: 23-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/872,792
; FILING DATE: 23-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/833,552
; FILING DATE: 10-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/832,939
; FILING DATE: 10-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/766,354
; FILING DATE: 26-SEP-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/604,778
; FILING DATE: 26-OCT-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: RESNICK, DAVID S.
; REGISTRATION NUMBER: 34235
; REFERENCE/DOCKET NUMBER: 40435-CIP-8
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 523-3400
; TELEFAX: (617) 523-6440
; TELETYPE: 200291 STR UR
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 48 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-465-794-3

Query Match 64.8%; Score 35; DB 1; Length 48;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
: : : : :
DB 9 QYKHYC 14

RESULT 47

US-09-049-813-3
; Sequence 3, Application US/09049813

; Patent No. 6013762

; GENERAL INFORMATION:

; APPLICANT: FOLKMAN, MOSES J.

; APPLICANT: SHING, YUEN

; APPLICANT: IGARASHI, KOICHI

; TITLE OF INVENTION: SMOOTH MUSCLE MITOGEN AND ISOLATED DNA

; TITLE OF INVENTION: CODING THEREFORE

; NUMBER OF SEQUENCES: 18

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: DAVID G. CONLIN; DIKE, BRONSTEIN, ROBERTS &

; STREET: 130 WATER STREET

; CITY: BOSTON

; STATE: MASSACHUSETTS

; COUNTRY: US

; ZIP: 02109

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/049,813

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/465,794

; FILING DATE:

; APPLICATION NUMBER: US 08/007,126

; FILING DATE: 21-JAN-1993

; APPLICATION NUMBER: US 07/994,776

; FILING DATE: 22-DEC-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/872,597

; FILING DATE: 23-APR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/872,792

; FILING DATE: 23-APR-1992

; APPLICATION NUMBER: US 07/833,552

; FILING DATE: 10-FEB-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/832,939

; FILING DATE: 10-FEB-1992

; APPLICATION NUMBER: US 07/766,354

; FILING DATE: 26-SEP-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/604,778

; FILING DATE: 26-OCT-1990

; ATTORNEY/AGENT INFORMATION:

; NAME: RESNICK, DAVID S.

; REGISTRATION NUMBER: 34235

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (617) 523-3400

; TELEFAX: (617) 523-6440

; TELETYPE: 200291 STR UR

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 48 amino acids

; TYPE: amino acid
; TOPOLOGY: linear
US-09-049-813-3

Query Match 64.8%; Score 35; DB 2; Length 48;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
: : : : :
DB 9 QYKHYC 14

RESULT 48

US-09-857-815B-11
; Sequence 11, Application US/09857815B

; Patent No. 6825165

; GENERAL INFORMATION:

; APPLICANT: Takeda Chemical Industries, Ltd.

; FILE REFERENCE: P2001-232

; CURRENT APPLICATION NUMBER: US/09/857,815B

; CURRENT FILING DATE: 2001-06-08

; PRIOR APPLICATION NUMBER: JP 10-350377

; PRIOR FILING DATE: 1998-12-09

; PRIOR APPLICATION NUMBER: JP 11-55326

; PRIOR FILING DATE: 1999-03-03

; NUMBER OF SEQ ID NOS: 64

; SEQ ID NO 11

; LENGTH: 48

; TYPE: PRT

; ORGANISM: Artificial sequence

; FEATURE:

; OTHER INFORMATION: amino acid sequence of betacellulin mutein (BTC 31-76, 78, 79)

US-09-857-815B-11

QY 4 EYRHYC 9
: : : : :
DB 11 QYKHYC 16

Query Match 64.8%; Score 35; DB 2; Length 48;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

RESULT 49
US-09-857-815B-14
; Sequence 14, Application US/09857815B

; Patent No. 6825165

; GENERAL INFORMATION:

; APPLICANT: Takeda Chemical Industries, Ltd.

; FILE REFERENCE: P2001-232

; CURRENT APPLICATION NUMBER: US/09/857,815B

; CURRENT FILING DATE: 2001-06-08

; PRIOR APPLICATION NUMBER: JP 10-350377

; PRIOR FILING DATE: 1998-12-09

; PRIOR APPLICATION NUMBER: JP 11-55326

; PRIOR FILING DATE: 1999-03-03

; NUMBER OF SEQ ID NOS: 64

; SEQ ID NO 14

; LENGTH: 48

; TYPE: PRT

; ORGANISM: Artificial sequence

; FEATURE:

; OTHER INFORMATION: amino acid sequence of betacellulin mutein (BTC 31-77, 79)

US-09-857-815B-14

QY 4 EYRHYC 9
: : : : :
DB 4 EYRHYC 9

Query Match 64.8%; Score 35; DB 2; Length 48;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db :|||
11 QYKHYC 16

RESULT 50

US-09-857-815B-45
; Sequence 45, Application US/09857815B
; Patent No. 6825165
; GENERAL INFORMATION:
; APPLICANT: Takeda Chemical Industries, Ltd.
; TITLE OF INVENTION: Betacellulin Mutein
; FILE REFERENCE: P2001-232
; CURRENT APPLICATION NUMBER: US/09/857,815B
; CURRENT FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: JP 10-350377
; PRIOR FILING DATE: 1998-12-09
; PRIOR APPLICATION NUMBER: JP 11-55326
; PRIOR FILING DATE: 1999-03-03
; NUMBER OF SEQ ID NOS: 64
; SEQ ID NO 45
; LENGTH: 48
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: amino acid sequence of betacellulin mutein (asn, ser, asp, ser, c
US-09-857-815B-45

Query Match 64.8%; Score 35; DB 2; Length 48;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
:|||
Db 9 QYKHYC 14

Search completed: May 5, 2006, 03:13:26
Job time : 23.7 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 07:56:48 ; Search time 56 Seconds
(without alignments)
67.151 Million cell updates/sec

Title: US-08-170-344-11
Perfect score: 54
Sequence: 1 KISEYRHYC 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues
Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :
1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
4: /cgn2_6/prodata/1/pubppaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	54	100.0	9	5	US-10-751-845-78
2	54	100.0	10	5	US-10-751-845-76
3	54	100.0	15	4	US-10-476-570-31
4	54	100.0	15	4	US-10-476-570-32
5	54	100.0	20	4	US-10-476-570-12
6	54	100.0	23	5	US-10-751-845-66
7	54	100.0	117	5	US-10-751-845-126
8	54	100.0	151	4	US-10-177-390-6
9	54	100.0	151	5	US-10-484-063-20
10	54	100.0	151	5	US-10-484-063-27
11	54	100.0	158	5	US-10-858-384-2
12	54	100.0	158	5	US-10-367-057-16
13	54	100.0	158	6	US-11-021-949-13
14	54	100.0	171	4	US-10-472-724-2
15	54	100.0	236	5	US-10-751-845-157
16	54	100.0	237	5	US-10-751-845-158
17	54	100.0	243	6	US-11-072-288-1
18	54	100.0	261	5	US-10-751-845-160
19	54	100.0	266	3	US-09-367-309A-1
20	54	100.0	273	4	US-10-000-903-4
21	54	100.0	273	5	US-10-899-771-4
22	54	100.0	292	4	US-10-000-903-10
23	54	100.0	292	4	US-10-899-771-10
24	54	100.0	371	4	US-10-000-903-6
25	54	100.0	371	5	US-10-899-771-6
26	54	100.0	390	4	US-10-000-903-14
27	54	100.0	390	5	US-10-899-771-14

28	49	90.7	9	5	US-10-751-845-70
29	49	90.7	10	5	US-10-751-845-75
30	49	90.7	29	4	US-10-476-570-55
31	49	90.7	29	5	US-10-858-384-8
32	45	83.3	10	5	US-10-751-845-80
33	45	83.3	15	4	US-10-476-570-33
34	45	83.3	148	6	US-11-021-949-17
35	45	83.3	149	6	US-11-021-949-15
36	45	83.3	149	6	US-11-021-949-16
37	41	75.9	9	4	US-10-239-313A-313
38	41	75.9	9	5	US-10-751-845-86
39	41	75.9	10	5	US-10-751-845-93
40	40	72.2	112	4	US-10-425-115-249267
41	39	72.2	147	4	US-10-425-115-308652
42	39	72.2	1815	6	US-11-097-143-11596
43	38	70.4	28	3	US-09-809-391-640
44	38	70.4	28	3	US-09-882-171-640
45	38	70.4	28	4	US-10-164-861-640
46	38	70.4	113	4	US-10-264-237-2295
47	38	70.4	180	4	US-10-408-765A-1288
48	38	70.4	198	4	US-10-001-054-40
49	38	70.4	198	4	US-10-028-072-550
50	38	70.4	198	4	US-10-140-808-550
51	38	70.4	198	4	US-10-121-049-550
52	38	70.4	198	4	US-10-123-904-550
53	38	70.4	198	4	US-10-140-470-550
54	38	70.4	198	4	US-10-175-746-550
55	38	70.4	198	4	US-10-176-918-550
56	38	70.4	198	4	US-10-176-921-550
57	38	70.4	198	4	US-10-127-884-226
58	38	70.4	198	4	US-10-137-865-550
59	38	70.4	198	4	US-10-140-474-550
60	38	70.4	198	4	US-10-142-431-550
61	38	70.4	198	4	US-10-143-114-550
62	38	70.4	198	4	US-10-230-163-550
63	38	70.4	198	4	US-10-230-338-226
64	38	70.4	198	4	US-10-142-419-550
65	38	70.4	198	4	US-10-218-631-226
66	38	70.4	198	4	US-10-123-262-550
67	38	70.4	198	4	US-10-142-423-550
68	38	70.4	198	4	US-10-230-414-226
69	38	70.4	198	4	US-10-121-050-550
70	38	70.4	198	4	US-10-141-755-550
71	38	70.4	198	4	US-10-143-032-550
72	38	70.4	198	4	US-10-232-228-226
73	38	70.4	198	4	US-10-123-108-550
74	38	70.4	198	4	US-10-123-236-550
75	38	70.4	198	4	US-10-123-261-550
76	38	70.4	198	4	US-10-140-921-550
77	38	70.4	198	4	US-10-140-928-550
78	38	70.4	198	4	US-10-216-158A-226
79	38	70.4	198	4	US-10-121-045-550
80	38	70.4	198	4	US-10-123-292-550
81	38	70.4	198	4	US-10-123-903-550
82	38	70.4	198	4	US-10-124-819-550
83	38	70.4	198	4	US-10-124-822-550
84	38	70.4	198	4	US-10-140-923-550
85	38	70.4	198	4	US-10-160-498-550
86	38	70.4	198	4	US-10-218-849-226
87	38	70.4	198	4	US-10-227-873-226
88	38	70.4	198	4	US-10-227-883-226
89	38	70.4	198	4	US-10-124-824-550
90	38	70.4	198	4	US-10-127-825A-550
91	38	70.4	198	4	US-10-127-829A-550
92	38	70.4	198	4	US-10-127-833A-550
93	38	70.4	198	4	US-10-127-901A-550
94	38	70.4	198	4	US-10-128-693A-550
95	38	70.4	198	4	US-10-131-813A-550
96	38	70.4	198	4	US-10-131-818A-550
97	38	70.4	198	4	US-10-131-823A-550
98	38	70.4	198	4	US-10-131-824A-550
99	38	70.4	198	4	US-10-131-830A-550
100	38	70.4	198	4	US-10-131-830A-550

101	38	70.4	198	4	US-10-131-837A-550	Sequence 550, App	174	38	70.4	198	4	US-10-127-832A-550	Sequence 550, App
102	38	70.4	198	4	US-10-137-872A-550	Sequence 550, App	175	38	70.4	198	4	US-10-127-833A-550	Sequence 550, App
103	38	70.4	198	4	US-10-147-500-550	Sequence 550, App	176	38	70.4	198	4	US-10-127-834A-550	Sequence 550, App
104	38	70.4	198	4	US-10-147-502-550	Sequence 550, App	177	38	70.4	198	4	US-10-127-836A-550	Sequence 550, App
105	38	70.4	198	4	US-10-147-515-550	Sequence 550, App	178	38	70.4	198	4	US-10-127-841A-550	Sequence 550, App
106	38	70.4	198	4	US-10-147-517-550	Sequence 550, App	179	38	70.4	198	4	US-10-127-844A-550	Sequence 550, App
107	38	70.4	198	4	US-10-147-526-550	Sequence 550, App	180	38	70.4	198	4	US-10-128-687A-550	Sequence 550, App
108	38	70.4	198	4	US-10-147-527-550	Sequence 550, App	181	38	70.4	198	4	US-10-128-688A-550	Sequence 550, App
109	38	70.4	198	4	US-10-121-041-550	Sequence 550, App	182	38	70.4	198	4	US-10-128-699A-550	Sequence 550, App
110	38	70.4	198	4	US-10-121-043-550	Sequence 550, App	183	38	70.4	198	4	US-10-128-694A-550	Sequence 550, App
111	38	70.4	198	4	US-10-121-047-550	Sequence 550, App	184	38	70.4	198	4	US-10-131-825A-550	Sequence 550, App
112	38	70.4	198	4	US-10-123-215-550	Sequence 550, App	185	38	70.4	198	4	US-10-230-417-550	Sequence 550, App
113	38	70.4	198	4	US-10-123-902-550	Sequence 550, App	186	38	70.4	198	4	US-10-219-003-226	Sequence 226, App
114	38	70.4	198	4	US-10-123-908-550	Sequence 550, App	187	38	70.4	198	4	US-10-219-075-226	Sequence 226, App
115	38	70.4	198	4	US-10-123-909-550	Sequence 550, App	188	38	70.4	198	4	US-10-219-464-226	Sequence 226, App
116	38	70.4	198	4	US-10-123-910-550	Sequence 550, App	189	38	70.4	198	4	US-10-219-466-226	Sequence 226, App
117	38	70.4	198	4	US-10-124-813-550	Sequence 550, App	190	38	70.4	198	4	US-10-219-479-226	Sequence 226, App
118	38	70.4	198	4	US-10-124-817-550	Sequence 550, App	191	38	70.4	198	4	US-10-219-481-226	Sequence 226, App
119	38	70.4	198	4	US-10-125-922-550	Sequence 550, App	192	38	70.4	198	4	US-10-230-260-226	Sequence 226, App
120	38	70.4	198	4	US-10-125-924-550	Sequence 550, App	193	38	70.4	198	4	US-10-233-231-226	Sequence 226, App
121	38	70.4	198	4	US-10-140-860-550	Sequence 550, App	194	38	70.4	198	4	US-10-233-233-226	Sequence 226, App
122	38	70.4	198	4	US-10-147-417-550	Sequence 550, App	195	38	70.4	198	4	US-10-131-815A-550	Sequence 550, App
123	38	70.4	198	4	US-10-147-519-550	Sequence 550, App	196	38	70.4	198	4	US-10-131-817A-550	Sequence 550, App
124	38	70.4	198	4	US-10-157-782-550	Sequence 550, App	197	38	70.4	198	4	US-10-131-821A-550	Sequence 550, App
125	38	70.4	198	4	US-10-153-395-550	Sequence 550, App	198	38	70.4	198	4	US-10-131-822A-550	Sequence 550, App
126	38	70.4	198	4	US-10-219-076-226	Sequence 226, App	199	38	70.4	198	4	US-10-131-828A-550	Sequence 550, App
127	38	70.4	198	4	US-10-230-434-226	Sequence 226, App	200	38	70.4	198	4	US-10-137-835A-550	Sequence 550, App
128	38	70.4	198	4	US-10-125-926A-550	Sequence 550, App	201	38	70.4	198	4	US-10-137-864A-550	Sequence 550, App
129	38	70.4	198	4	US-10-125-930A-550	Sequence 550, App	202	38	70.4	198	4	US-10-147-523-550	Sequence 550, App
130	38	70.4	198	4	US-10-127-831A-550	Sequence 550, App	203	38	70.4	198	4	US-10-156-785-550	Sequence 550, App
131	38	70.4	198	4	US-10-127-837A-550	Sequence 550, App	204	38	70.4	198	4	US-10-121-051-550	Sequence 550, App
132	38	70.4	198	4	US-10-127-838B-550	Sequence 550, App	205	38	70.4	198	4	US-10-216-165-226	Sequence 226, App
133	38	70.4	198	4	US-10-127-842A-550	Sequence 550, App	206	38	70.4	198	4	US-10-219-956-226	Sequence 226, App
134	38	70.4	198	4	US-10-127-843A-550	Sequence 550, App	207	38	70.4	198	4	US-10-219-468-226	Sequence 226, App
135	38	70.4	198	4	US-10-127-845A-550	Sequence 550, App	208	38	70.4	198	4	US-10-219-478-226	Sequence 226, App
136	38	70.4	198	4	US-10-127-846A-550	Sequence 550, App	209	38	70.4	198	4	US-10-219-536-226	Sequence 226, App
137	38	70.4	198	4	US-10-127-848A-550	Sequence 550, App	210	38	70.4	198	4	US-10-233-205-226	Sequence 226, App
138	38	70.4	198	4	US-10-127-849A-550	Sequence 550, App	211	38	70.4	198	4	US-10-233-042-550	Sequence 550, App
139	38	70.4	198	4	US-10-127-850A-550	Sequence 550, App	212	38	70.4	198	4	US-10-219-072-226	Sequence 226, App
140	38	70.4	198	4	US-10-127-851A-550	Sequence 550, App	213	38	70.4	198	4	US-10-219-470-226	Sequence 226, App
141	38	70.4	198	4	US-10-128-684A-550	Sequence 550, App	214	38	70.4	198	4	US-10-219-474-226	Sequence 226, App
142	38	70.4	198	4	US-10-128-686A-550	Sequence 550, App	215	38	70.4	198	4	US-10-219-544-226	Sequence 226, App
143	38	70.4	198	4	US-10-128-690A-550	Sequence 550, App	216	38	70.4	198	4	US-10-219-528-226	Sequence 226, App
144	38	70.4	198	4	US-10-128-691A-550	Sequence 550, App	217	38	70.4	198	4	US-10-227-880-226	Sequence 226, App
145	38	70.4	198	4	US-10-131-819A-550	Sequence 550, App	218	38	70.4	198	4	US-10-227-881-226	Sequence 226, App
146	38	70.4	198	4	US-10-131-829A-550	Sequence 550, App	219	38	70.4	198	4	US-10-227-882-226	Sequence 226, App
147	38	70.4	198	4	US-10-131-836A-550	Sequence 550, App	220	38	70.4	198	4	US-10-230-436-226	Sequence 226, App
148	38	70.4	198	4	US-10-146-729-550	Sequence 550, App	221	38	70.4	198	4	US-10-233-223-226	Sequence 226, App
149	38	70.4	198	4	US-10-147-484-550	Sequence 550, App	222	38	70.4	198	4	US-10-233-225-226	Sequence 226, App
150	38	70.4	198	4	US-10-147-508-550	Sequence 550, App	223	38	70.4	198	4	US-10-233-227-226	Sequence 226, App
151	38	70.4	198	4	US-10-147-512-550	Sequence 550, App	224	38	70.4	198	4	US-10-233-229-226	Sequence 226, App
152	38	70.4	198	4	US-10-175-735-550	Sequence 550, App	225	38	70.4	198	4	US-10-219-060-226	Sequence 226, App
153	38	70.4	198	4	US-10-121-040-550	Sequence 550, App	226	38	70.4	198	4	US-10-123-912-550	Sequence 226, App
154	38	70.4	198	4	US-10-121-056-550	Sequence 550, App	227	38	70.4	198	4	US-10-123-085-298	Sequence 226, App
155	38	70.4	198	4	US-10-121-061-550	Sequence 550, App	228	38	70.4	198	4	US-10-216-162-226	Sequence 226, App
156	38	70.4	198	4	US-10-123-235-550	Sequence 550, App	229	38	70.4	198	4	US-10-216-154-226	Sequence 226, App
157	38	70.4	198	4	US-10-124-818-550	Sequence 550, App	230	38	70.4	198	4	US-10-219-077-226	Sequence 226, App
158	38	70.4	198	4	US-10-137-868-550	Sequence 550, App	231	38	70.4	198	4	US-10-219-167-226	Sequence 226, App
159	38	70.4	198	4	US-10-147-492-550	Sequence 550, App	232	38	70.4	198	4	US-10-219-168-226	Sequence 226, App
160	38	70.4	198	4	US-10-158-782-550	Sequence 550, App	233	38	70.4	198	4	US-10-219-065-226	Sequence 226, App
161	38	70.4	198	4	US-10-123-905-550	Sequence 550, App	234	38	70.4	198	4	US-10-219-071-226	Sequence 226, App
162	38	70.4	198	4	US-10-123-907-550	Sequence 550, App	235	38	70.4	198	4	US-10-219-473-226	Sequence 226, App
163	38	70.4	198	4	US-10-124-815-550	Sequence 550, App	236	38	70.4	198	4	US-10-219-476-226	Sequence 226, App
164	38	70.4	198	4	US-10-125-921A-550	Sequence 550, App	237	38	70.4	198	4	US-10-219-482-226	Sequence 226, App
165	38	70.4	198	4	US-10-125-928A-550	Sequence 550, App	238	38	70.4	198	4	US-10-219-484-226	Sequence 226, App
166	38	70.4	198	4	US-10-127-821A-550	Sequence 550, App	239	38	70.4	198	4	US-10-219-469-226	Sequence 226, App
167	38	70.4	198	4	US-10-127-822A-550	Sequence 550, App	240	38	70.4	198	4	US-10-219-471-226	Sequence 226, App
168	38	70.4	198	4	US-10-127-824A-550	Sequence 550, App	241	38	70.4	198	4	US-10-219-473-226	Sequence 226, App
169	38	70.4	198	4	US-10-127-826A-550	Sequence 550, App	242	38	70.4	198	4	US-10-219-476-226	Sequence 226, App
170	38	70.4	198	4	US-10-127-827A-550	Sequence 550, App	243	38	70.4	198	4	US-10-219-482-226	Sequence 226, App
171	38	70.4	198	4	US-10-127-828A-550	Sequence 550, App	244	38	70.4	198	4	US-10-219-484-226	Sequence 226, App
172	38	70.4	198	4	US-10-127-830A-550	Sequence 550, App	245	38	70.4	198	4	US-10-219-486-226	Sequence 226, App
173	38	70.4	198	4	US-10-127-832A-550	Sequence 550, App	246	38	70.4	198	4	US-10-219-488-226	Sequence 226, App

393	38	70.4	198	4	US-10-147-524-550	Sequence 550, App	466	38	70.4	198	4	US-10-125-704-550	Sequence 550, App
394	38	70.4	198	4	US-10-152-379-550	Sequence 550, App	467	38	70.4	198	4	US-10-123-927-550	Sequence 550, App
395	38	70.4	198	4	US-10-152-394-550	Sequence 550, App	468	38	70.4	198	4	US-10-123-982-298	Sequence 298, App
396	38	70.4	198	4	US-10-152-406-550	Sequence 550, App	469	38	70.4	198	4	US-10-142-889-550	Sequence 550, App
397	38	70.4	198	4	US-10-156-847-550	Sequence 550, App	470	38	70.4	198	4	US-10-145-874-550	Sequence 550, App
398	38	70.4	198	4	US-10-157-778-550	Sequence 550, App	471	38	70.4	198	4	US-10-147-497-550	Sequence 550, App
399	38	70.4	198	4	US-10-157-799-550	Sequence 550, App	472	38	70.4	198	4	US-10-152-771-550	Sequence 550, App
400	38	70.4	198	4	US-10-160-504-550	Sequence 550, App	473	38	70.4	198	4	US-10-152-374-550	Sequence 550, App
401	38	70.4	198	4	US-10-145-634-550	Sequence 550, App	474	38	70.4	198	4	US-10-152-375-550	Sequence 550, App
402	38	70.4	198	4	US-10-147-520-550	Sequence 550, App	475	38	70.4	198	4	US-10-152-377-550	Sequence 550, App
403	38	70.4	198	4	US-10-157-781-550	Sequence 550, App	476	38	70.4	198	4	US-10-152-386-550	Sequence 550, App
404	38	70.4	198	4	US-10-176-989-550	Sequence 550, App	477	38	70.4	198	4	US-10-152-391-550	Sequence 550, App
405	38	70.4	198	4	US-10-147-911-550	Sequence 550, App	478	38	70.4	198	4	US-10-152-399-550	Sequence 550, App
406	38	70.4	198	4	US-10-152-378-550	Sequence 550, App	479	38	70.4	198	4	US-10-156-848-550	Sequence 550, App
407	38	70.4	198	4	US-10-152-382-550	Sequence 550, App	480	38	70.4	198	4	US-10-157-785-550	Sequence 550, App
408	38	70.4	198	4	US-10-152-383-550	Sequence 550, App	481	38	70.4	198	4	US-10-157-794-550	Sequence 550, App
409	38	70.4	198	4	US-10-152-384-550	Sequence 550, App	482	38	70.4	198	4	US-10-157-796-550	Sequence 550, App
410	38	70.4	198	4	US-10-152-387-550	Sequence 550, App	483	38	70.4	198	4	US-10-160-500-550	Sequence 550, App
411	38	70.4	198	4	US-10-152-389-550	Sequence 550, App	484	38	70.4	198	4	US-10-121-046-550	Sequence 550, App
412	38	70.4	198	4	US-10-152-390-550	Sequence 550, App	485	38	70.4	198	4	US-10-123-156-550	Sequence 550, App
413	38	70.4	198	4	US-10-152-392-550	Sequence 550, App	486	38	70.4	198	4	US-10-123-214-550	Sequence 550, App
414	38	70.4	198	4	US-10-153-756-550	Sequence 550, App	487	38	70.4	198	4	US-10-125-805-550	Sequence 550, App
415	38	70.4	198	4	US-10-157-784-550	Sequence 550, App	488	38	70.4	198	4	US-10-124-821-550	Sequence 550, App
416	38	70.4	198	4	US-10-157-797-550	Sequence 550, App	489	38	70.4	198	4	US-10-152-385-550	Sequence 550, App
417	38	70.4	198	4	US-10-158-911-550	Sequence 550, App	490	38	70.4	198	4	US-10-152-393-550	Sequence 550, App
418	38	70.4	198	4	US-10-142-762-550	Sequence 550, App	491	38	70.4	198	4	US-10-152-396-550	Sequence 550, App
419	38	70.4	198	4	US-10-142-764-550	Sequence 550, App	492	38	70.4	198	4	US-10-153-552-550	Sequence 550, App
420	38	70.4	198	4	US-10-142-766-550	Sequence 550, App	493	38	70.4	198	4	US-10-153-840-550	Sequence 550, App
421	38	70.4	198	4	US-10-145-625-550	Sequence 550, App	494	38	70.4	198	4	US-10-156-841-550	Sequence 550, App
422	38	70.4	198	4	US-10-145-627-550	Sequence 550, App	495	38	70.4	198	4	US-10-156-842-550	Sequence 550, App
423	38	70.4	198	4	US-10-145-660-550	Sequence 550, App	496	38	70.4	198	4	US-10-156-844-550	Sequence 550, App
424	38	70.4	198	4	US-10-145-962-550	Sequence 550, App	497	38	70.4	198	4	US-10-156-845-550	Sequence 550, App
425	38	70.4	198	4	US-10-146-789-550	Sequence 550, App	498	38	70.4	198	4	US-10-156-846-550	Sequence 550, App
426	38	70.4	198	4	US-10-147-483-550	Sequence 550, App	499	38	70.4	198	4	US-10-121-048-550	Sequence 550, App
427	38	70.4	198	4	US-10-147-496-550	Sequence 550, App	500	38	70.4	198	4	US-10-121-052-550	Sequence 550, App
428	38	70.4	198	4	US-10-147-505-550	Sequence 550, App	501	38	70.4	198	4	US-10-121-053-550	Sequence 550, App
429	38	70.4	198	4	US-10-147-516-550	Sequence 550, App	502	38	70.4	198	4	US-10-121-054-550	Sequence 550, App
430	38	70.4	198	4	US-10-152-398-550	Sequence 550, App	503	38	70.4	198	4	US-10-121-063-550	Sequence 550, App
431	38	70.4	198	4	US-10-139-980-550	Sequence 550, App	504	38	70.4	198	4	US-10-123-212-550	Sequence 550, App
432	38	70.4	198	4	US-10-145-750-550	Sequence 550, App	505	38	70.4	198	4	US-10-123-213-550	Sequence 550, App
433	38	70.4	198	4	US-10-152-373-550	Sequence 550, App	506	38	70.4	198	4	US-10-123-291-550	Sequence 550, App
434	38	70.4	198	4	US-10-223-081-298	Sequence 298, App	507	38	70.4	198	4	US-10-123-322-550	Sequence 550, App
435	38	70.4	198	4	US-10-218-765-550	Sequence 226, App	508	38	70.4	198	4	US-10-123-771-550	Sequence 550, App
436	38	70.4	198	4	US-10-219-063-226	Sequence 226, App	509	38	70.4	198	4	US-10-123-911-550	Sequence 550, App
437	38	70.4	198	4	US-10-219-066-226	Sequence 226, App	510	38	70.4	198	4	US-10-124-823-550	Sequence 550, App
438	38	70.4	198	4	US-10-219-067-226	Sequence 226, App	511	38	70.4	198	4	US-10-125-931-550	Sequence 550, App
439	38	70.4	198	4	US-10-219-068-226	Sequence 226, App	512	38	70.4	198	4	US-10-125-932-550	Sequence 550, App
440	38	70.4	198	4	US-10-219-069-226	Sequence 226, App	513	38	70.4	198	4	US-10-127-852A-550	Sequence 550, App
441	38	70.4	198	4	US-10-219-073-226	Sequence 226, App	514	38	70.4	198	4	US-10-127-900A-550	Sequence 550, App
442	38	70.4	198	4	US-10-219-475-226	Sequence 226, App	515	38	70.4	198	4	US-10-128-685A-550	Sequence 550, App
443	38	70.4	198	4	US-10-219-480-226	Sequence 226, App	516	38	70.4	198	4	US-10-131-820A-550	Sequence 550, App
444	38	70.4	198	4	US-10-219-483-226	Sequence 226, App	517	38	70.4	198	4	US-10-142-886-550	Sequence 550, App
445	38	70.4	198	4	US-10-219-525-226	Sequence 226, App	518	38	70.4	198	4	US-10-146-728-550	Sequence 550, App
446	38	70.4	198	4	US-10-219-526-226	Sequence 226, App	519	38	70.4	198	4	US-10-146-786-550	Sequence 550, App
447	38	70.4	198	4	US-10-219-530-226	Sequence 226, App	520	38	70.4	198	4	US-10-147-499-550	Sequence 550, App
448	38	70.4	198	4	US-10-219-531-226	Sequence 226, App	521	38	70.4	198	4	US-10-157-798-550	Sequence 550, App
449	38	70.4	198	4	US-10-219-532-226	Sequence 226, App	522	38	70.4	198	4	US-10-123-913-550	Sequence 550, App
450	38	70.4	198	4	US-10-219-533-226	Sequence 226, App	523	38	70.4	198	4	US-10-140-473-550	Sequence 550, App
451	38	70.4	198	4	US-10-230-437-226	Sequence 226, App	524	38	70.4	198	4	US-10-140-806-550	Sequence 550, App
452	38	70.4	198	4	US-10-232-228-226	Sequence 226, App	525	38	70.4	198	4	US-10-140-810-550	Sequence 550, App
453	38	70.4	198	4	US-10-121-044-550	Sequence 550, App	526	38	70.4	198	4	US-10-140-863-550	Sequence 550, App
454	38	70.4	198	4	US-10-121-055-550	Sequence 550, App	527	38	70.4	198	4	US-10-141-699-550	Sequence 550, App
455	38	70.4	198	4	US-10-121-057-550	Sequence 550, App	528	38	70.4	198	4	US-10-141-703-550	Sequence 550, App
456	38	70.4	198	4	US-10-121-058-550	Sequence 550, App	529	38	70.4	198	4	US-10-141-706-550	Sequence 550, App
457	38	70.4	198	4	US-10-121-059-550	Sequence 550, App	530	38	70.4	198	4	US-10-141-757-550	Sequence 550, App
458	38	70.4	198	4	US-10-121-060-550	Sequence 550, App	531	38	70.4	198	4	US-10-141-762-550	Sequence 550, App
459	38	70.4	198	4	US-10-123-109-550	Sequence 550, App	532	38	70.4	198	4	US-10-142-428-550	Sequence 550, App
460	38	70.4	198	4	US-10-123-154-550	Sequence 550, App	533	38	70.4	198	4	US-10-142-429-550	Sequence 550, App
461	38	70.4	198	4	US-10-123-157-550	Sequence 550, App	534	38	70.4	198	4	US-10-142-884-550	Sequence 550, App
462	38	70.4	198	4	US-10-123-906-550	Sequence 550, App	535	38	70.4	198	4	US-10-143-027-550	Sequence 550, App
463	38	70.4	198	4	US-10-124-814-550	Sequence 550, App	536	38	70.4	198	4	US-10-143-315-550	Sequence 550, App
464	38	70.4	198	4	US-10-124-816-550	Sequence 550, App	537	38	70.4	198	4	US-10-144-956-550	Sequence 550, App
465	38	70.4	198	4	US-10-124-820-550	Sequence 550, App	538	38	70.4	198	4	US-10-144-958-550	Sequence 550, App

539	38	70.4	198	4	US-10-145-632-550	Sequence 550, App	612	38	70.4	326	5	US-10-204-921-58	Sequence 58, App1
540	38	70.4	198	4	US-10-145-749-550	Sequence 550, App	613	37	66.5	74	5	US-10-450-763-55059	Sequence 55059, A
541	38	70.4	198	4	US-10-145-753-550	Sequence 550, App	614	37	66.5	332	4	US-10-369-493-21405	Sequence 21405, A
542	38	70.4	198	4	US-10-145-871-550	Sequence 550, App	615	37	68.5	669	4	US-10-782-141-5	Sequence 5, App1
543	38	70.4	198	4	US-10-145-878-550	Sequence 550, App	616	37	68.5	672	4	US-10-782-141-3	Sequence 3, App1
544	38	70.4	198	4	US-10-146-794-550	Sequence 550, App	617	36	66.7	36	4	US-10-437-963-112061	Sequence 133061, A
545	38	70.4	198	4	US-10-147-489-550	Sequence 550, App	618	36	66.7	74	4	US-10-425-115-217827	Sequence 217827, A
546	38	70.4	198	4	US-10-147-507-550	Sequence 550, App	619	36	66.7	120	4	US-10-425-115-319354	Sequence 319354, A
547	38	70.4	198	4	US-10-147-535-550	Sequence 550, App	620	36	66.7	156	4	US-10-425-115-311918	Sequence 311918, A
548	38	70.4	198	4	US-10-147-537-550	Sequence 550, App	621	36	66.7	178	3	US-09-764-870-319	Sequence 319, App
549	38	70.4	198	4	US-10-152-376-550	Sequence 550, App	622	36	66.7	178	3	US-09-764-853-478	Sequence 478, App
550	38	70.4	198	4	US-10-152-381-550	Sequence 550, App	623	36	66.7	178	4	US-10-125-540-319	Sequence 319, App
551	38	70.4	198	4	US-10-152-400-550	Sequence 550, App	624	36	66.7	178	4	US-10-103-313-309	Sequence 309, App
552	38	70.4	198	4	US-10-153-585-550	Sequence 550, App	625	36	66.7	210	4	US-10-158-057-377	Sequence 337, App
553	38	70.4	198	4	US-10-157-780-550	Sequence 550, App	626	36	66.7	178	4	US-10-450-763-48567	Sequence 48567, A
554	38	70.4	198	4	US-10-157-800-550	Sequence 550, App	627	36	66.7	244	5	US-10-781-979-25	Sequence 279, App
555	38	70.4	198	4	US-10-157-801-550	Sequence 550, App	628	36	66.7	370	4	US-10-247-671-172	Sequence 172, App
556	38	70.4	198	4	US-10-157-802-550	Sequence 550, App	629	36	66.7	392	4	US-10-406-686A-65	Sequence 65, App1
557	38	70.4	198	4	US-10-158-784-550	Sequence 550, App	630	36	66.7	431	5	US-10-450-763-51500	Sequence 51500, A
558	38	70.4	198	4	US-10-158-789-550	Sequence 550, App	631	36	66.7	666	4	US-10-782-141-23	Sequence 23, App1
559	38	70.4	198	4	US-10-158-789-550	Sequence 550, App	632	36	66.7	666	4	US-10-782-096-23	Sequence 23, App1
560	38	70.4	198	4	US-10-192-011-550	Sequence 550, App	633	36	66.7	666	4	US-10-781-979-25	Sequence 25, App1
561	38	70.4	198	4	US-10-139-963-550	Sequence 550, App	634	36	66.7	666	5	US-10-781-979-25	Sequence 30674, A
562	38	70.4	198	4	US-10-140-020-550	Sequence 550, App	635	36	66.7	1064	4	US-10-450-763-30674	Sequence 1, App1
563	38	70.4	198	4	US-10-140-023-550	Sequence 550, App	636	36	66.7	1064	5	US-10-220-510-1	Sequence 3242, Ap
564	38	70.4	198	4	US-10-140-809-550	Sequence 550, App	637	36	66.7	1254	5	US-10-952-915-28	Sequence 28, App1
565	38	70.4	198	4	US-10-140-865-550	Sequence 550, App	638	35	64.8	45	3	US-09-817-647-11	Sequence 11, App1
566	38	70.4	198	4	US-10-141-701-550	Sequence 550, App	639	35	64.8	45	3	US-09-877-665-11	Sequence 11, App1
567	38	70.4	198	4	US-10-141-754-550	Sequence 550, App	640	35	64.8	45	3	US-10-136-573A-11	Sequence 11, App1
568	38	70.4	198	4	US-10-142-425-550	Sequence 550, App	641	35	64.8	45	4	US-10-215-862-11	Sequence 11, App1
569	38	70.4	198	4	US-10-142-430-550	Sequence 550, App	642	35	64.8	45	4	US-10-141-116-11	Sequence 11, App1
570	38	70.4	198	4	US-10-143-113-550	Sequence 550, App	643	35	64.8	45	6	US-11-035-787-11	Sequence 11, App1
571	38	70.4	198	4	US-10-146-730-550	Sequence 550, App	644	35	64.8	46	4	US-10-201-945-12	Sequence 12, App1
572	38	70.4	198	4	US-10-158-791-550	Sequence 550, App	645	35	64.8	46	4	US-10-240-411-10	Sequence 10, App1
573	38	70.4	198	4	US-10-156-843-550	Sequence 550, App	646	35	64.8	49	4	US-10-609-370-15	Sequence 15, App1
574	38	70.4	198	4	US-10-157-786-550	Sequence 550, App	647	35	64.8	50	5	US-10-485-683-9	Sequence 9, App1
575	38	70.4	198	4	US-10-152-405-550	Sequence 550, App	648	35	64.8	80	4	US-10-139-158-17	Sequence 17, App1
576	38	70.4	198	4	US-10-147-528-550	Sequence 550, App	649	35	64.8	96	4	US-10-337-993-2	Sequence 304122, A
577	38	70.4	198	4	US-10-305-654-298	Sequence 298, App	650	35	64.8	96	4	US-10-767-701-56846	Sequence 56846, A
578	38	70.4	198	4	US-10-322-226-226	Sequence 226, App	651	35	64.8	92	4	US-11-021-949-14	Sequence 14, App1
579	38	70.4	198	4	US-10-128-692A-550	Sequence 550, App	652	35	64.8	149	6	US-10-367-057-11	Sequence 11, App1
580	38	70.4	198	4	US-10-140-927-550	Sequence 550, App	653	35	64.8	150	5	US-10-424-599-190642	Sequence 190642, A
581	38	70.4	198	4	US-10-140-927-550	Sequence 550, App	654	35	64.8	153	4	US-09-227-853A-13	Sequence 13, App1
582	38	70.4	198	4	US-10-230-130-226	Sequence 226, App	655	35	64.8	177	3	US-10-654-102-75	Sequence 75, App1
583	38	70.4	198	4	US-10-147-493-550	Sequence 550, App	656	35	64.8	177	4	US-10-654-102-78	Sequence 81, App1
584	38	70.4	198	4	US-10-145-127-550	Sequence 550, App	657	35	64.8	177	4	US-10-654-102-81	Sequence 81, App1
585	38	70.4	198	4	US-10-160-503-550	Sequence 550, App	658	35	64.8	177	4	US-10-654-102-71	Sequence 71, App1
586	38	70.4	198	4	US-10-143-118-550	Sequence 550, App	659	35	64.8	177	4	US-10-654-102-73	Sequence 73, App1
587	38	70.4	198	4	US-10-144-993-550	Sequence 550, App	660	35	64.8	177	4	US-10-654-102-75	Sequence 75, App1
588	38	70.4	198	4	US-10-158-787-550	Sequence 550, App	661	35	64.8	177	4	US-10-654-102-80	Sequence 80, App1
589	38	70.4	198	4	US-10-081-056-298	Sequence 298, App	662	35	64.8	177	4	US-10-654-102-82	Sequence 82, App1
590	38	70.4	198	4	US-10-219-535-226	Sequence 226, App	663	35	64.8	177	4	US-10-654-102-88	Sequence 88, App1
591	38	70.4	198	4	US-10-232-230-226	Sequence 226, App	664	35	64.8	178	4	US-10-654-102-76	Sequence 76, App1
592	38	70.4	198	4	US-10-142-426-550	Sequence 550, App	665	35	64.8	178	4	US-10-654-102-77	Sequence 77, App1
593	38	70.4	198	4	US-10-140-024-550	Sequence 550, App	666	35	64.8	178	4	US-10-654-102-76	Sequence 76, App1
594	38	70.4	198	4	US-10-147-536-550	Sequence 550, App	667	35	64.8	178	4	US-10-654-102-76	Sequence 76, App1
595	38	70.4	198	4	US-10-119-480-226	Sequence 226, App	668	35	64.8	178	4	US-10-654-102-80	Sequence 80, App1
596	38	70.4	198	4	US-10-152-372-550	Sequence 550, App	669	35	64.8	178	4	US-10-654-102-82	Sequence 82, App1
597	38	70.4	198	4	US-10-125-795-550	Sequence 550, App	670	35	64.8	209	4	US-10-425-115-289864	Sequence 289864, A
598	38	70.4	198	4	US-10-145-626-550	Sequence 550, App	671	35	64.8	484	4	US-10-437-963-190165	Sequence 190165, A
599	38	70.4	198	4	US-10-145-819-550	Sequence 550, App	672	35	64.8	545	4	US-10-424-599-166372	Sequence 166372, A
600	38	70.4	198	4	US-10-145-825-550	Sequence 550, App	673	35	64.8	673	4	US-10-425-114-59015	Sequence 59015, A
601	38	70.4	198	4	US-10-147-513-550	Sequence 550, App	674	35	64.8	675	4	US-10-782-141-17	Sequence 17, App1
602	38	70.4	198	4	US-10-147-518-550	Sequence 550, App	675	35	64.8	675	4	US-10-782-096-18	Sequence 18, App1
603	38	70.4	198	5	US-10-145-951-550	Sequence 550, App	676	35	64.8	675	5	US-10-782-570-14	Sequence 12, App1
604	38	70.4	198	5	US-10-219-477-226	Sequence 226, App	677	35	64.8	675	5	US-10-782-417-12	Sequence 14, App1
605	38	70.4	198	5	US-10-147-488-550	Sequence 350, App	678	35	64.8	675	5	US-10-781-979-19	Sequence 19, App1
606	38	70.4	198	5	US-10-147-531-550	Sequence 550, App	679	35	64.8	733	4	US-10-926-819-16	Sequence 16, App1
607	38	70.4	198	5	US-10-931-886-550	Sequence 550, App	680	35	64.8	937	4	US-10-425-115-319142	Sequence 319142, A
608	38	70.4	198	5	US-10-158-788-550	Sequence 550, App	681	35	64.8	1182	6	US-10-437-963-121757	Sequence 121757, A
609	38	70.4	198	5	US-10-955-952-550	Sequence 550, App	682	35	64.8	2109	6	US-11-097-143-20106	Sequence 20106, A
610	38	70.4	198	6	US-11-036-869A-2	Sequence 2, App1	683	35	64.8	39	4	US-10-223-070-6	Sequence 6, App1
611	38	70.4	220	4	US-10-106-698-5750	Sequence 5750, App	684	34	63.0	34	4	US-10-437-963-118061	Sequence 118061, A

685	34	63.0	46	5	US-10-450-763-55015	Sequence 55015, A	758	33	61.1	452	5	US-10-450-763-34892	Sequence 34892, A
686	34	63.0	75	4	US-10-424-599-229003	Sequence 229003,	759	33	61.1	454	6	US-11-097-143-33234	Sequence 33234, A
687	34	63.0	111	4	US-10-425-115-258760	Sequence 258760,	760	33	61.1	476	4	US-10-425-114-41946	Sequence 41946, A
688	34	63.0	113	4	US-10-425-115-195167	Sequence 195167,	761	33	61.1	477	4	US-10-369-493-23077	Sequence 23077, A
689	34	63.0	119	4	US-10-767-701-34087	Sequence 34087, A	762	33	61.1	485	4	US-10-369-493-23271	Sequence 23271, A
690	34	63.0	122	4	US-10-437-963-156988	Sequence 156988,	763	33	61.1	532	3	US-09-903-068-6	Sequence 6, App1
691	34	63.0	130	5	US-10-450-763-32229	Sequence 32229, A	764	33	61.1	532	3	US-09-903-068-14	Sequence 14, App1
692	34	63.0	148	4	US-10-424-599-212803	Sequence 212803,	765	33	61.1	532	3	US-09-874-658-2	Sequence 2, App1
693	34	63.0	149	6	US-11-021-949-360	Sequence 360, App	766	33	61.1	532	3	US-09-989-543A-6	Sequence 6, App1
694	34	63.0	150	6	US-11-021-949-27	Sequence 27, App1	767	33	61.1	532	4	US-10-153-217-3	Sequence 3, App1
695	34	63.0	180	4	US-10-425-115-255153	Sequence 255153,	768	33	61.1	532	4	US-10-286-152A-38	Sequence 38, App1
696	34	63.0	224	6	US-11-097-143-11297	Sequence 11297, A	769	33	61.1	532	4	US-10-463-190-102	Sequence 102, App
697	34	63.0	228	4	US-10-437-963-111257	Sequence 111257,	770	33	61.1	532	4	US-10-463-190-105	Sequence 105, App
698	34	63.0	228	4	US-10-425-115-221423	Sequence 221423,	771	33	61.1	532	4	US-10-463-190-106	Sequence 106, App
699	34	63.0	228	4	US-10-225-066A-398	Sequence 398, App	772	33	61.1	532	4	US-10-463-190-107	Sequence 107, App
700	34	63.0	246	4	US-10-374-780A-2752	Sequence 2752, Ap	773	33	61.1	532	4	US-10-463-190-110	Sequence 110, App
701	34	63.0	246	5	US-10-225-066A-398	Sequence 398, App	774	33	61.1	532	4	US-10-600-645-2	Sequence 2, App1
702	34	63.0	250	4	US-10-425-114-65472	Sequence 65472, A	775	33	61.1	532	5	US-10-739-413-6	Sequence 6, App1
703	34	63.0	291	5	US-10-732-923-8509	Sequence 8509, Ap	776	33	61.1	532	5	US-10-739-413-14	Sequence 14, App1
704	34	63.0	298	4	US-10-425-115-251791	Sequence 251791,	777	33	61.1	532	5	US-10-868-497-71	Sequence 71, App1
705	34	63.0	305	4	US-10-282-122A-65748	Sequence 65748, A	778	33	61.1	532	5	US-10-868-497-74	Sequence 74, App1
706	34	63.0	315	3	US-09-930-512-26	Sequence 26, App1	779	33	61.1	532	5	US-10-868-497-75	Sequence 75, App1
707	34	63.0	418	3	US-09-816-664-2	Sequence 2, App1	780	33	61.1	532	5	US-10-868-497-76	Sequence 76, App1
708	34	63.0	418	4	US-10-193-452-2	Sequence 2, App1	781	33	61.1	532	5	US-10-868-497-79	Sequence 79, App1
709	34	63.0	420	4	US-10-362-939-2	Sequence 2, App1	782	33	61.1	532	5	US-10-493-380-38	Sequence 38, App1
710	34	63.0	420	5	US-10-618-281-12	Sequence 12, App1	783	33	61.1	532	6	US-10-745-237-308	Sequence 308, App
711	34	63.0	439	4	US-10-437-963-177276	Sequence 177276,	784	33	61.1	532	6	US-11-098-889-6	Sequence 6, App1
712	34	63.0	480	3	US-09-925-298-559	Sequence 559, App	785	33	61.1	533	5	US-10-450-763-53229	Sequence 53229, A
713	34	63.0	480	4	US-10-102-806-559	Sequence 559, App	786	33	61.1	534	4	US-10-437-963-144336	Sequence 144336,
714	34	63.0	573	6	US-11-097-143-18297	Sequence 18297, A	787	33	61.1	545	4	US-10-369-493-22449	Sequence 22449, A
715	34	63.0	944	4	US-10-369-493-2245	Sequence 2245, Ap	788	33	61.1	546	4	US-10-369-493-1901	Sequence 1901, Ap
716	34	63.0	944	4	US-10-369-566-2099	Sequence 2099, Ap	789	33	61.1	567	3	US-09-843-378-13	Sequence 13, App1
717	34	63.0	957	4	US-10-403-571-120	Sequence 120, App	790	33	61.1	690	5	US-10-781-979-5	Sequence 5, App1
718	34	63.0	1080	4	US-10-405-219-62	Sequence 62, App1	791	33	61.1	693	5	US-10-781-979-3	Sequence 3, App1
719	34	63.0	1350	5	US-10-450-763-51238	Sequence 51238, A	792	33	61.1	749	4	US-10-369-493-22359	Sequence 22359
720	34	63.0	1362	4	US-10-425-115-283301	Sequence 283301,	793	33	61.1	753	5	US-10-450-763-53236	Sequence 53236, A
721	34	63.0	1395	4	US-10-282-122A-50586	Sequence 50586, A	794	33	61.1	871	4	US-10-369-493-22089	Sequence 22089, A
722	34	63.0	1987	4	US-10-032-585-7518	Sequence 7518, Ap	795	33	61.1	871	5	US-10-450-763-35191	Sequence 35191, A
723	34	63.0	2293	4	US-10-032-438B-2	Sequence 2, App1	796	33	61.1	944	4	US-10-156-761-7947	Sequence 7947, Ap
724	33	61.1	44	4	US-10-424-599-284669	Sequence 284669,	797	33	61.1	996	4	US-10-437-963-134646	Sequence 134646,
725	33	61.1	52	4	US-10-425-115-228743	Sequence 228743,	798	33	61.1	1119	6	US-11-097-143-2817	Sequence 2817, Ap
726	33	61.1	55	4	US-10-437-963-137533	Sequence 137533,	799	33	61.1	1360	4	US-10-437-963-200277	Sequence 200277,
727	33	61.1	58	4	US-10-124-972A-7105	Sequence 7105, Ap	800	33	61.1	1882	5	US-10-450-763-35443	Sequence 35443, A
728	33	61.1	62	4	US-10-108-311-3	Sequence 3, App1	801	33	61.1	1885	5	US-10-450-763-38020	Sequence 38020, A
729	33	61.1	62	5	US-10-441-624-3	Sequence 3, App1	802	33	61.1	2013	5	US-10-450-763-43016	Sequence 43016, A
730	33	61.1	67	4	US-10-424-599-152072	Sequence 152072,	803	33	61.1	2265	5	US-10-092-900A-296	Sequence 296, App
731	33	61.1	67	4	US-10-425-115-192215	Sequence 192215,	804	33	61.1	2296	5	US-10-723-860-1555	Sequence 1555, Ap
732	33	61.1	74	3	US-09-864-761-41045	Sequence 41045, A	805	33	61.1	2296	5	US-10-756-149-5112	Sequence 5112, Ap
733	33	61.1	99	4	US-10-437-963-111858	Sequence 111858,	806	33	61.1	2327	4	US-10-092-900A-294	Sequence 294, App
734	33	61.1	116	4	US-10-425-115-185628	Sequence 185628,	807	33	61.1	2390	4	US-10-092-900A-292	Sequence 292, App
735	33	61.1	116	4	US-10-425-115-312636	Sequence 312636,	808	33	61.1	3674	4	US-10-029-100A-454	Sequence 454, App
736	33	61.1	118	4	US-10-437-963-186191	Sequence 186191,	809	33	60.2	94	4	US-10-437-963-202923	Sequence 202923,
737	33	61.1	119	4	US-10-425-114-47416	Sequence 47416, A	810	32	59.3	28	3	US-10-286-457-467	Sequence 467, App
738	33	61.1	123	4	US-10-425-115-367637	Sequence 367637,	811	32	59.3	28	3	US-09-925-297-832	Sequence 832, App
739	33	61.1	156	4	US-10-767-701-40877	Sequence 40877, A	812	32	59.3	30	4	US-10-425-115-358069	Sequence 358069,
740	33	61.1	173	5	US-10-450-763-36229	Sequence 36229, A	813	32	59.3	34	3	US-09-864-761-42152	Sequence 42152, A
741	33	61.1	212	4	US-10-432-991-5	Sequence 5, App1	814	32	59.3	34	4	US-10-424-599-162506	Sequence 162506,
742	33	61.1	271	6	US-11-097-143-24777	Sequence 24777, A	815	32	59.3	39	3	US-09-864-761-45869	Sequence 45869, A
743	33	61.1	277	4	US-10-335-977-9713	Sequence 9713, Ap	816	32	59.3	40	3	US-09-864-761-46179	Sequence 46179, A
744	33	61.1	291	4	US-10-017-161-2388	Sequence 2388, Ap	817	32	59.3	41	3	US-09-864-761-44588	Sequence 44588, A
745	33	61.1	291	4	US-10-292-798-2030	Sequence 2030, Ap	818	32	59.3	41	4	US-10-425-115-185832	Sequence 185832,
746	33	61.1	298	4	US-10-335-977-6959	Sequence 6959, Ap	819	32	59.3	44	3	US-09-764-877-1161	Sequence 1161, Ap
747	33	61.1	302	5	US-10-507-617-51	Sequence 51, App1	820	32	59.3	44	4	US-10-240-515-1161	Sequence 1161, Ap
748	33	61.1	304	5	US-10-732-923-16680	Sequence 16680, A	821	32	59.3	53	4	US-10-291-265-412	Sequence 412, App
749	33	61.1	305	4	US-10-424-599-165377	Sequence 65377, A	822	32	59.3	53	4	US-10-291-265-884	Sequence 884, App
750	33	61.1	342	4	US-10-337-963-117472	Sequence 117472,	823	32	59.3	54	4	US-10-424-599-152913	Sequence 152913,
751	33	61.1	364	4	US-10-081-816-24	Sequence 24, App1	824	32	59.3	55	4	US-10-425-115-241413	Sequence 241413,
752	33	61.1	364	4	US-10-447-328-10	Sequence 10, App1	825	32	59.3	59	4	US-10-424-599-206394	Sequence 206394,
753	33	61.1	387	4	US-10-425-114-49909	Sequence 49909, A	826	32	59.3	61	4	US-10-424-599-233494	Sequence 233494,
754	33	61.1	406	4	US-10-369-493-2966	Sequence 2966, Ap	827	32	59.3	61	5	US-10-450-763-53921	Sequence 53921, A
755	33	61.1	432	4	US-10-425-115-266645	Sequence 266645,	828	32	59.3	62	4	US-10-424-599-183210	Sequence 183210,
756	33	61.1	432	5	US-10-739-930-10434	Sequence 10434, A	829	32	59.3	64	4	US-10-425-115-197645	Sequence 197645,
757	33	61.1	438	4	US-10-043-487-321	Sequence 321, App	830	32	59.3	69	4	US-10-083-357-829	Sequence 829, App

831	32	59.3	74	4	US-10-424-599-212738	Sequence 212738,	904	32	59.3	297	4	US-10-343-663A-56	Sequence 56, Appl
832	32	59.3	79	4	US-10-425-115-228226	Sequence 228226,	905	32	59.3	300	4	US-10-343-663A-29	Sequence 29, Appl
833	32	59.3	82	4	US-10-424-599-189980	Sequence 189980,	906	32	59.3	301	4	US-09-764-868-660	Sequence 660, App
834	32	59.3	87	3	US-09-764-868-1191	Sequence 1191, Ap	907	32	59.3	301	3	US-09-764-868-1084	Sequence 1084, Ap
835	32	59.3	94	4	US-10-437-963-185067	Sequence 185067,	908	32	59.3	301	4	US-10-437-963-125073	Sequence 125073,
836	32	59.3	97	4	US-10-424-599-173470	Sequence 173470,	909	32	59.3	306	4	US-10-437-963-157038	Sequence 157038,
837	32	59.3	99	4	US-10-425-115-368758	Sequence 368758,	910	32	59.3	328	4	US-10-369-493-10248	Sequence 10248, A
838	32	59.3	100	4	US-10-425-115-214548	Sequence 214548,	911	32	59.3	346	4	US-10-389-566-1807	Sequence 1807, Ap
839	32	59.3	101	4	US-10-767-701-38412	Sequence 38412, A	912	32	59.3	346	5	US-10-723-923-18019	Sequence 18019, Ap
840	32	59.3	104	4	US-10-425-115-214548	Sequence 214548,	913	32	59.3	349	4	US-10-260-877-1010	Sequence 1010, Appl
841	32	59.3	113	3	US-09-784-553C-24	Sequence 24, Appl	914	32	59.3	349	4	US-10-282-122A-58054	Sequence 58054, A
842	32	59.3	117	4	US-10-209-201C-24	Sequence 24, Appl	915	32	59.3	352	4	US-10-767-701-34738	Sequence 34738, A
843	32	59.3	123	4	US-10-425-115-169104	Sequence 169104,	916	32	59.3	354	6	US-10-097-143-1767	Sequence 1767, Ap
844	32	59.3	124	4	US-10-767-701-52909	Sequence 52909, A	917	32	59.3	384	5	US-10-500-530-52	Sequence 53052,
845	32	59.3	142	4	US-10-343-663A-57	Sequence 57, Appl	918	32	59.3	393	4	US-10-437-963-109155	Sequence 109155,
846	32	59.3	142	4	US-10-343-663A-58	Sequence 58, Appl	919	32	59.3	396	4	US-10-282-122A-69258	Sequence 69258, A
847	32	59.3	148	6	US-11-021-949-19	Sequence 19, Appl	920	32	59.3	398	5	US-10-954-778-37	Sequence 778-37
848	32	59.3	151	5	US-10-732-923-5260	Sequence 5260, Ap	921	32	59.3	398	5	US-10-954-778-39	Sequence 778-39
849	32	59.3	151	6	US-11-021-949-24	Sequence 24, Appl	922	32	59.3	428	4	US-10-369-493-12453	Sequence 12453, A
850	32	59.3	159	4	US-10-437-963-140227	Sequence 140227,	923	32	59.3	440	5	US-10-478-019-1170	Sequence 1170, App
851	32	59.3	164	4	US-10-724-972A-5313	Sequence 5313, Ap	924	32	59.3	448	4	US-10-425-115-263779	Sequence 263779,
852	32	59.3	164	5	US-10-724-972A-5313	Sequence 5313, Ap	925	32	59.3	458	4	US-10-437-963-182210	Sequence 182210,
853	32	59.3	165	4	US-10-739-930-8975	Sequence 8975, Ap	926	32	59.3	468	4	US-10-425-115-222764	Sequence 222764,
854	32	59.3	165	4	US-10-425-114-70009	Sequence 70009, A	927	32	59.3	468	6	US-11-097-143-22134	Sequence 22134, A
855	32	59.3	165	4	US-10-425-115-244107	Sequence 244107,	928	32	59.3	482	4	US-10-437-963-128612	Sequence 128612,
856	32	59.3	170	4	US-10-425-115-244107	Sequence 244107,	929	32	59.3	507	4	US-10-343-663A-30	Sequence 30, Appl
857	32	59.3	174	4	US-10-425-115-237148	Sequence 237148,	930	32	59.3	510	4	US-10-369-493-56	Sequence 369-56
858	32	59.3	181	4	US-10-425-115-244105	Sequence 244105,	931	32	59.3	518	4	US-10-425-115-351271	Sequence 351271,
859	32	59.3	196	4	US-10-425-115-281007	Sequence 281007,	932	32	59.3	522	4	US-10-437-963-109133	Sequence 109133,
860	32	59.3	196	5	US-10-437-963-128608	Sequence 128608,	933	32	59.3	533	4	US-10-425-114-45498	Sequence 45498, A
861	32	59.3	200	4	US-10-732-923-4109	Sequence 4109, Ap	934	32	59.3	541	4	US-10-369-493-10980	Sequence 10980, A
862	32	59.3	203	3	US-10-425-114-72349	Sequence 72349, A	935	32	59.3	551	5	US-10-732-923-4520	Sequence 4520, Ap
863	32	59.3	203	3	US-09-815-242-110084	Sequence 110084, A	936	32	59.3	590	4	US-10-425-115-298625	Sequence 298625,
864	32	59.3	203	4	US-10-282-122A-56472	Sequence 56472, A	937	32	59.3	610	4	US-10-369-493-12847	Sequence 12847, A
865	32	59.3	203	4	US-10-437-963-129482	Sequence 129482,	938	32	59.3	612	4	US-10-425-115-298834	Sequence 298834,
866	32	59.3	210	4	US-10-767-701-46351	Sequence 46351, A	939	32	59.3	621	5	US-10-450-763-51168	Sequence 51168, A
867	32	59.3	212	4	US-10-425-115-366162	Sequence 366162,	940	32	59.3	621	6	US-11-097-143-30681	Sequence 30681, A
868	32	59.3	214	4	US-10-425-115-366165	Sequence 366165,	941	32	59.3	678	3	US-09-901-132-4	Sequence 4, Appl1
869	32	59.3	216	5	US-10-424-599-284682	Sequence 284682,	942	32	59.3	678	3	US-10-483-32-2	Sequence 2, Appl1
870	32	59.3	218	4	US-10-739-930-6555	Sequence 6555, Ap	943	32	59.3	682	5	US-09-901-136-2	Sequence 37, Appl
871	32	59.3	221	4	US-10-767-701-38114	Sequence 38114, A	944	32	59.3	724	4	US-10-483-322-2	Sequence 3263, Appl
872	32	59.3	227	4	US-10-425-114-39495	Sequence 39495, A	945	32	59.3	726	4	US-10-108-260A-3263	Sequence 3263, Appl
873	32	59.3	227	4	US-10-425-114-53264	Sequence 53264, A	946	32	59.3	747	4	US-10-618-941-129	Sequence 129, App
874	32	59.3	229	4	US-10-424-599-284691	Sequence 284691,	947	32	59.3	747	4	US-10-310-154-622	Sequence 622, App
875	32	59.3	229	4	US-10-767-701-41136	Sequence 41136, A	948	32	59.3	747	5	US-10-732-923-489	Sequence 499, App
876	32	59.3	232	4	US-10-424-599-284692	Sequence 284692,	949	32	59.3	776	4	US-10-267-988-24	Sequence 24, Appl
877	32	59.3	233	4	US-10-424-599-160503	Sequence 160503,	950	32	59.3	809	4	US-10-437-963-148299	Sequence 148299,
878	32	59.3	240	4	US-10-425-114-44449	Sequence 44449, A	951	32	59.3	816	3	US-09-976-165-37	Sequence 37, Appl
879	32	59.3	241	4	US-10-425-114-38493	Sequence 38493, A	952	32	59.3	816	4	US-10-342-276-37	Sequence 37, Appl
880	32	59.3	241	4	US-10-425-114-45027	Sequence 45027, A	953	32	59.3	816	5	US-10-723-860-1018	Sequence 1018, Ap
881	32	59.3	241	4	US-10-425-114-61755	Sequence 61755, A	954	32	59.3	816	5	US-10-756-149-4965	Sequence 4965, Ap
882	32	59.3	241	4	US-10-425-114-72668	Sequence 72668, A	955	32	59.3	824	4	US-10-437-963-148300	Sequence 148300,
883	32	59.3	243	4	US-10-425-114-59827	Sequence 59827, A	956	32	59.3	988	5	US-10-450-763-48396	Sequence 48396, A
884	32	59.3	243	4	US-10-767-701-44382	Sequence 44382, A	957	32	59.3	1018	6	US-11-097-143-10929	Sequence 10929, A
885	32	59.3	246	4	US-10-425-114-69565	Sequence 69565, A	958	32	59.3	1041	6	US-11-097-143-5529	Sequence 5529, Ap
886	32	59.3	246	4	US-10-425-115-242365	Sequence 242365,	959	32	59.3	1066	4	US-10-369-493-13110	Sequence 13110, A
887	32	59.3	247	4	US-10-425-114-61688	Sequence 61688, A	960	32	59.3	1166	4	US-10-337-963-159124	Sequence 159124,
888	32	59.3	249	4	US-10-425-114-51607	Sequence 51607, A	961	32	59.3	1237	4	US-10-037-417-70	Sequence 70, Appl
889	32	59.3	250	5	US-10-389-432B-58	Sequence 58, Appl	962	32	59.3	1373	4	US-10-437-963-159397	Sequence 159397,
890	32	59.3	250	5	US-10-692-67-58	Sequence 67, Appl	963	32	59.3	1404	5	US-10-732-923-4303	Sequence 4303, Ap
891	32	59.3	252	6	US-11-097-143-13584	Sequence 13584, A	964	32	59.3	1423	2	US-08-424-550B-82	Sequence 82, Appl
892	32	59.3	252	4	US-10-425-114-63189	Sequence 63189, A	965	32	59.3	1423	2	US-11-097-143-42290	Sequence 42390, A
893	32	59.3	252	4	US-10-425-115-344945	Sequence 344945,	966	32	59.3	1447	5	US-10-745-237-76	Sequence 76, Appl
894	32	59.3	255	4	US-10-425-114-59488	Sequence 59488, A	967	32	59.3	1661	4	US-10-425-115-300504	Sequence 300504,
895	32	59.3	256	4	US-10-425-115-366164	Sequence 366164,	968	32	59.3	1661	4	US-10-425-115-299805	Sequence 299805,
896	32	59.3	256	4	US-10-425-114-52160	Sequence 52160, A	969	32	59.3	1767	4	US-10-425-115-300638	Sequence 300638,
897	32	59.3	258	4	US-10-425-114-56193	Sequence 56193, A	970	32	59.3	1831	4	US-10-466-759-4	Sequence 4, Appl1
898	32	59.3	266	4	US-10-425-115-205382	Sequence 205382,	971	32	59.3	1837	4	US-10-210-281-58	Sequence 58, Appl
899	32	59.3	270	6	US-11-097-143-4169	Sequence 4169, A	972	32	59.3	1929	4	US-10-723-860-95	Sequence 95, Appl
900	32	59.3	279	4	US-10-425-114-36883	Sequence 36883, A	973	32	59.3	3007	6	US-11-097-143-23332	Sequence 23332, A
901	32	59.3	282	4	US-10-437-963-142250	Sequence 142250,	974	32	59.3	6659	5	US-10-723-860-25	Sequence 25, Appl
902	32	59.3	285	4	US-10-424-599-162184	Sequence 162184,	975	32	59.3	6659	5	US-10-425-115-260047	Sequence 260047,
903	32	59.3	286	4	US-10-425-114-36868	Sequence 36868, A	976	31.5	58.3	44	4		

```
977 31.5 58.3 67 4 US-10-424-599-163255 Sequence 163255.
978 31 57.4 21 5 US-10-504-687-43 Sequence 43, Appl
979 31 57.4 22 3 US-09-933-767-895 Sequence 895, App
980 31 57.4 22 4 US-10-004-860-895 Sequence 895, App
981 31 57.4 22 4 US-10-023-282-895 Sequence 895, App
982 31 57.4 25 4 US-10-339-740-228 Sequence 228, App
983 31 57.4 39 3 US-09-764-891-1061 Sequence 3061, Ap
984 31 57.4 44 4 US-10-425-115-325969 Sequence 325969,
985 31 57.4 48 4 US-10-437-963-178387 Sequence 178387,
986 31 57.4 49 4 US-10-424-599-181771 Sequence 181771,
987 31 57.4 49 4 US-10-425-115-223226 Sequence 223226,
988 31 57.4 56 4 US-10-424-599-201677 Sequence 201677,
989 31 57.4 59 4 US-10-424-599-229753 Sequence 229753,
990 31 57.4 60 4 US-10-437-963-130848 Sequence 130848,
991 31 57.4 70 4 US-10-424-599-265415 Sequence 265415,
992 31 57.4 74 3 US-09-939-980-456 Sequence 456, App
993 31 57.4 74 4 US-10-424-599-217668 Sequence 217668,
994 31 57.4 74 4 US-10-437-963-103115 Sequence 103115,
995 31 57.4 77 4 US-10-425-115-254747 Sequence 254747,
996 31 57.4 87 4 US-10-156-761-8044 Sequence 8044, Ap
997 31 57.4 90 4 US-10-425-115-286453 Sequence 286453,
998 31 57.4 92 4 US-10-416-314-59 Sequence 59, Appl
999 31 57.4 92 4 US-10-437-963-201532 Sequence 201532,
1000 31 57.4 99 4 US-10-029-386-34091 Sequence 34091, A
```

ALIGNMENTS

```
RESULT 1
US-10-751-845-78
; Sequence 78, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 78
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-78

Query Match 100.0%; Score 54; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 76
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-76

Query Match 100.0%; Score 54; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.009;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 3
US-10-476-570-31
; Sequence 31, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: FOVEILLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 31
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide B6 76-90
US-10-476-570-31

Query Match 100.0%; Score 54; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.013;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: PR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 32
LENGTH: 15
TYPE: PRT
ORGANISM: artificial sequence
OTHER INFORMATION: Description of the artificial sequence: peptide E6 78-92
US-10-476-570-32
```

```
Query Match      100.0%; Score 54; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.013; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
Db      2 KISEYRHYC 10
```

RESULT 5
US-10-476-570-12

```
Sequence 12, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
TITLE OF INVENTION: Papillomavirus proteins and uses thereof
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: PR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 12
LENGTH: 20
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E6 76-95
US-10-476-570-12
```

```
Query Match      100.0%; Score 54; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.017;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
Db      4 KISEYRHYC 12
```

RESULT 6
US-10-751-845-66
Sequence 66, Application US/10751845

```
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 66
LENGTH: 23
TYPE: PRT
ORGANISM: Human Papilloma virus
US-10-751-845-66
```

```
Query Match      100.0%; Score 54; DB 5; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.02; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
Db      1 KISEYRHYC 9
```

RESULT 7
US-10-751-845-126

```
Sequence 126, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 126
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-126
```

```
Query Match      100.0%; Score 54; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 0.091; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
Db      45 KISEYRHYC 53
```

RESULT 8
US-10-177-390-6
Sequence 6, Application US/10177390
Publication No. US20030143743A1


```
; GENERAL INFORMATION:
; APPLICANT: Schuler, Gerold
; APPLICANT: N.V. Antwerp Innovatiecentrum
; TITLE OF INVENTION: Improved transfection of Eucaryotic Cells with Linear
; FILE REFERENCE: 021505wo/JH/ml
; CURRENT APPLICATION NUMBER: US/10/177,390
; CURRENT FILING DATE: 2002-06-20
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-177-390-6

Query Match          100.0%; Score 54; DB 4; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 72 KISEYRHYC 80

RESULT 9
US-10-484-063-20
; Sequence 20, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILLELMO
; APPLICANT: FOLLEN, MICHELE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 20
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-20

Query Match          100.0%; Score 54; DB 5; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 72 KISEYRHYC 80

RESULT 10
US-10-484-063-27
; Sequence 27, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILLELMO
; APPLICANT: FOLLEN, MICHELE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
```

```
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-484-063-27

Query Match          100.0%; Score 54; DB 5; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 72 KISEYRHYC 80

RESULT 11
US-10-858-384-2
; Sequence 2, Application US/10858384
; Publication No. US2005003025A1
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCES
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; CURRENT FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 2
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-858-384-2

Query Match          100.0%; Score 54; DB 5; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
   |||||
Db 79 KISEYRHYC 87

RESULT 12
US-10-367-057-16
; Sequence 16, Application US/10367057
; Publication No. US20050100554A1
; GENERAL INFORMATION:
; APPLICANT: Cutbill, Scott;
; APPLICANT: Jackson, Amanda;
; APPLICANT: Lewin, David A.;
; APPLICANT: Ooi, Chean Eng
; TITLE OF INVENTION: Complexes and Methods of Using Same
; FILE REFERENCE: 21402-559
; CURRENT APPLICATION NUMBER: US/10/367,057
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 60/256,911
; PRIOR FILING DATE: 2002-02-14
; NUMBER OF SEQ ID NOS: 198
; SOFTWARE: CuroseqList version 0.1
; SEQ ID NO 16
```


LENGTH: 158
TYPE: PRT
ORGANISM: Homo sapiens
US-10-367-057-16

Query Match 100.0%; Score 54; DB 5; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||||
Db 79 KISEYRHYC 87

RESULT 13
US-11-021-949-13
Sequence 13, Application US/11021949
Publication No. US20050142541A1
GENERAL INFORMATION:
APPLICANT: LU, PETER
APPLICANT: GARMAN, JONATHAN DAVID
APPLICANT: BELMARES, MICHAEL P.
APPLICANT: DIAZ-SAMIENTO, CHAMORO SOMOZA

APPLICANT: SCHWEIZER, JOHANNES
TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
FILE REFERENCE: VITA-012
CURRENT APPLICATION NUMBER: US/11/021,949
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: 60/532,373
PRIOR FILING DATE: 2003-12-23
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 13
LENGTH: 158
TYPE: PRT
ORGANISM: human papilloma virus (HPV)
US-11-021-949-13

Query Match 100.0%; Score 54; DB 6; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||||
Db 79 KISEYRHYC 87

RESULT 14
US-10-472-724-2
Sequence 2, Application US/10472724
Publication No. US20040171806A1
GENERAL INFORMATION:
APPLICANT: Cid-Arregui, Angel
APPLICANT: Zur Hausen, Harald

TITLE OF INVENTION: Modified HPV E6 and E7 genes and proteins useful for vaccination
FILE REFERENCE: 4121-154
CURRENT APPLICATION NUMBER: US/10/472,724
CURRENT FILING DATE: 2003-09-17
PRIOR APPLICATION NUMBER: PCT/EP02/03271
PRIOR FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: EP 01107271.7
PRIOR FILING DATE: 2001-03-23
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.2
SEQ ID NO 2
LENGTH: 171
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Construct
US-10-472-724-2

Query Match 100.0%; Score 54; DB 4; Length 171;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||||
Db 84 KISEYRHYC 92

RESULT 15
US-10-751-845-157
Sequence 157, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.

APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 157
LENGTH: 236
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-157

Query Match 100.0%; Score 54; DB 5; Length 236;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||||
Db 45 KISEYRHYC 53

RESULT 16
US-10-751-845-158
Sequence 158, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.

APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 158
LENGTH: 237
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-158

Query Match 100.0%; Score 54; DB 5; Length 237;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
46 KISEYRHYC 54

RESULT 17

US-11-072-288-1
; Sequence 1, Application US/11072288
; Publication No. US20050159386A1
; GENERAL INFORMATION:
; APPLICANT: KIENY, Marie-Paule
; APPLICANT: BALLOU, Jean-Marc
; APPLICANT: BIZOUARNE, Nadine
; TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
; TITLE OF INVENTION: POLYPEPTIDE WITH MODIFIED CELL LOCATION
; FILE REFERENCE: 017753-122
; CURRENT APPLICATION NUMBER: US/11/072,288
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US/09/462,993
; PRIOR FILING DATE: 2000-04-17
; PRIOR APPLICATION NUMBER: PCT/FR98/01576
; PRIOR FILING DATE: 1998-07-17
; PRIOR APPLICATION NUMBER: FR 97/09152
; PRIOR FILING DATE: 1997-07-18
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.2
; SEQ ID NO 1
; LENGTH: 243
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Derived from
; OTHER INFORMATION: human papillomavirus, strain HPV-16, E6 protein
US-11-072-288-1

Query Match 100.0%; Score 54; DB 6; Length 243;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 107 KISEYRHYC 115

RESULT 18

US-10-751-845-160
; Sequence 160, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 160
; LENGTH: 261
; TYPE: PRT

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial fusion sequence
US-10-751-845-160

Query Match 100.0%; Score 54; DB 5; Length 261;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 70 KISEYRHYC 78

RESULT 19

US-09-367-309A-1
; Sequence 1, Application US/09367309A
; Publication No. US20020081329A1
; GENERAL INFORMATION:
; APPLICANT: MACFARLAN, RODERICK I.
; APPLICANT: MALLIAROS, JIM
; TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
; FILE REFERENCE: 017227/0149
; CURRENT APPLICATION NUMBER: US/09/367,309A
; CURRENT FILING DATE: 1999-08-11
; PRIOR APPLICATION NUMBER: PCT/AU98/00080
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: AU PO 5178
; PRIOR FILING DATE: 1997-02-19
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

Query Match 100.0%; Score 54; DB 3; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 79 KISEYRHYC 87

RESULT 20

US-10-000-903-4
; Sequence 4, Application US/10000903
; Publication No. US20020182221A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9719953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-4

Query Match 100.0%; Score 54; DB 4; Length 273;

Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KISEYRHYC 9
|||||
Db 165 KISEYRHYC 193

RESULT 21

US-10-899-771-4
; Sequence 4, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a CpG Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimeric protein (protein D from Haemophilus
; OTHER INFORMATION: influenzae B and E6 from Human papilloma virus type
; OTHER INFORMATION: 16)
US-10-899-771-4

Query Match 100.0%; Score 54; DB 5; Length 273;

Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KISEYRHYC 9
|||||
Db 165 KISEYRHYC 193

RESULT 22

US-10-000-903-10
; Sequence 10, Application US/10000903
; Publication No. US20020182221A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Bernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-10

Query Match 100.0%; Score 54; DB 4; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KISEYRHYC 9
|||||
Db 204 KISEYRHYC 212

RESULT 23

US-10-899-771-10
; Sequence 10, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a CpG Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimeric protein (Clyta from Streptococcus
; OTHER INFORMATION: pneumoniae and E6 from Human papilloma virus type
; OTHER INFORMATION: 16)
US-10-899-771-10

Query Match 100.0%; Score 54; DB 5; Length 292;

Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KISEYRHYC 9
|||||
Db 204 KISEYRHYC 212

RESULT 24

US-10-000-903-6
; Sequence 6, Application US/10000903
; Publication No. US20020182221A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Bernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-6

Query Match 100.0%; Score 54; DB 4; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 185 KISEYRHYC 193

RESULT 25

US-10-899-771-6
; Sequence 6, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimeric protein (protein D from Haemophilus
; OTHER INFORMATION: influenzae B and E6E7 fusion from Human papilloma
; OTHER INFORMATION: virus type 16)
US-10-899-771-6

Query Match 100.0%; Score 54; DB 5; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 185 KISEYRHYC 193

RESULT 26

US-10-000-903-14
; Sequence 14, Application US/10000903
; Publication No. US20020182221A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabeton Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 390
; TYPE: PRT
; ORGANISM: Homo sapien

US-10-000-903-14

Query Match 100.0%; Score 54; DB 4; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.28;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 204 KISEYRHYC 212

RESULT 27

US-10-899-771-14
; Sequence 14, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 390
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimeric protein (Clyta from Streptococcus
; OTHER INFORMATION: pneumoniae and E6E7 fusion from Human papilloma
; OTHER INFORMATION: virus type 16)
US-10-899-771-14

Query Match 100.0%; Score 54; DB 5; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.28;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
|||||
Db 204 KISEYRHYC 212

RESULT 28

US-10-751-845-70
; Sequence 70, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 70
; LENGTH: 9
; TYPE: PRT

ORGANISM: Human Papilloma virus
US-10-751-845-70

Query Match 90.7%; Score 49; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
| | | | |
Db 1 ISEYRHYC 8

RESULT 29
US-10-751-845-75
Sequence 75, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicx, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 75
LENGTH: 10
TYPE: PRT
ORGANISM: Human Papilloma virus
US-10-751-845-75

Query Match 90.7%; Score 49; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.068;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
| | | | |
Db 1 ISEYRHYC 8

RESULT 30
US-10-476-570-55
Sequence 55, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVEILLE-MORILLAS, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 55
LENGTH: 29
TYPE: PRT
ORGANISM: artificial sequence

FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E6 80-108
US-10-476-570-55

Query Match 90.7%; Score 49; DB 4; Length 29;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
| | | | |
Db 1 ISEYRHYC 8

RESULT 31
US-10-858-384-8
Sequence 8, Application US/10858384
Publication No. US2005003025A1
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: 0508-1037-1
CURRENT APPLICATION NUMBER: US/10/858,384
CURRENT FILING DATE: 2004-06-02
PRIOR APPLICATION NUMBER: FR 9907012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 8
LENGTH: 29
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of the Artificial Sequence: Peptide fragment
US-10-858-384-8

Query Match 90.7%; Score 49; DB 5; Length 29;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
| | | | |
Db 1 ISEYRHYC 8

RESULT 32
US-10-751-845-80
Sequence 80, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicx, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 80
LENGTH: 10

TYPE: PRT
ORGANISM: human papilloma virus
US-10-751-845-80

Query Match
Best Local Similarity 83.3%; Score 45; DB 5; Length 10;
100.0%; Pred. No. 0.34;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 SEYRHYC 9
|||||
Db 1 SEYRHYC 7

RESULT 33
US-10-476-570-33
Sequence 33, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLER, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 33
LENGTH: 15
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E6 81-95
US-10-476-570-33

Query Match
Best Local Similarity 83.3%; Score 45; DB 4; Length 15;
100.0%; Pred. No. 0.5;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 SEYRHYC 9
|||||
Db 1 SEYRHYC 7

RESULT 34
US-11-021-949-17
Sequence 17, Application US/11021949
Publication No. US20050142541A1
GENERAL INFORMATION:
APPLICANT: LU, PETER
APPLICANT: GARMAN, JONATHAN DAVID
APPLICANT: BELMARES, MICHAEL P.
APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
APPLICANT: SCHWEIZER, JOHANNES
TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
FILE REFERENCE: VITA-012
CURRENT APPLICATION NUMBER: US/11/021,949
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: 60/532,373
PRIOR FILING DATE: 2003-12-23
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 17
LENGTH: 148

TYPE: PRT
ORGANISM: human papilloma virus (HPV)
US-11-021-949-17

Query Match
Best Local Similarity 83.3%; Score 45; DB 6; Length 148;
100.0%; Pred. No. 4.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
|||||
Db 72 KISEYRHY 79

RESULT 35
US-11-021-949-15
Sequence 15, Application US/11021949
Publication No. US20050142541A1
GENERAL INFORMATION:
APPLICANT: LU, PETER
APPLICANT: GARMAN, JONATHAN DAVID
APPLICANT: BELMARES, MICHAEL P.
APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
APPLICANT: SCHWEIZER, JOHANNES
TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
FILE REFERENCE: VITA-012
CURRENT APPLICATION NUMBER: US/11/021,949
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: 60/532,373
PRIOR FILING DATE: 2003-12-23
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 15
LENGTH: 149
TYPE: PRT
ORGANISM: human papilloma virus (HPV)
US-11-021-949-15

Query Match
Best Local Similarity 83.3%; Score 45; DB 6; Length 149;
100.0%; Pred. No. 4.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
|||||
Db 72 KISEYRHY 79

RESULT 36
US-11-021-949-16
Sequence 16, Application US/11021949
Publication No. US20050142541A1
GENERAL INFORMATION:
APPLICANT: LU, PETER
APPLICANT: GARMAN, JONATHAN DAVID
APPLICANT: BELMARES, MICHAEL P.
APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
APPLICANT: SCHWEIZER, JOHANNES
TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
FILE REFERENCE: VITA-012
CURRENT APPLICATION NUMBER: US/11/021,949
CURRENT FILING DATE: 2004-12-23
PRIOR APPLICATION NUMBER: 60/532,373
PRIOR FILING DATE: 2003-12-23
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 16
LENGTH: 149
TYPE: PRT
ORGANISM: human papilloma virus (HPV)
US-11-021-949-16

Query Match
Best Local Similarity 83.3%; Score 45; DB 6; Length 149;

Best Local Similarity 100.0%; Pred. No. 4.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
|||||

DB 72 KISEYRHY 79

RESULT 37
US-10-239-313A-313

/ Sequence 313, Application US/10239313A
/ Publication No. US20030175285A1
/ GENERAL INFORMATION:
/ APPLICANT: KLINGUER - HAMOUR, Christine
/ APPLICANT: CORVAIA, Nathalie
/ APPLICANT: BECK, Alain
/ APPLICANT: GOETSCH, Liliane
/ TITLE OF INVENTION: MOLECULE OF PHARMACEUTICAL INTEREST COMPRISING AT ITS
/ TITLE OF INVENTION: N-TERMINAL A GLUTAMIC ACID OR A GLUTAMINE IN THE FORM
/ TITLE OF INVENTION: OF A PHYSIOLOGICALLY ACCEPTABLE STRONG ACID
/ FILE REFERENCE: 343 727 - US
/ CURRENT APPLICATION NUMBER: US/10/239,313A
/ CURRENT FILING DATE: 2002-09-19
/ PRIOR APPLICATION NUMBER: FR 00/03711
/ PRIOR FILING DATE: 2000-03-23
/ PRIOR APPLICATION NUMBER: PCT 01/70772
/ PRIOR FILING DATE: 2001-03-22
/ NUMBER OF SEQ ID NOS: 697
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 313
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-239-313A-313

Query Match 75.9%; Score 41; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
|||||

DB 1 EYRHYC 6

RESULT 38

US-10-751-845-86
/ Sequence 86, Application US/10751845
/ Publication No. US20050100928A1
/ GENERAL INFORMATION:
/ APPLICANT: Hedley, Mary Lynne
/ APPLICANT: Urban, Robert G.
/ APPLICANT: Chicz, Roman M.
/ TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
/ FILE REFERENCE: 08191-013001
/ CURRENT APPLICATION NUMBER: US/10/751,845
/ CURRENT FILING DATE: 2004-01-05
/ PRIOR APPLICATION NUMBER: US/09/664,225
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: US 60/169,846
/ PRIOR FILING DATE: 1999-12-09
/ PRIOR APPLICATION NUMBER: US 60/154,665
/ PRIOR FILING DATE: 1999-09-16
/ NUMBER OF SEQ ID NOS: 163
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 86
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Human Papilloma virus
US-10-751-845-86

Query Match 75.9%; Score 41; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
|||||

DB 1 EYRHYC 6

RESULT 39

US-10-751-845-93
/ Sequence 93, Application US/10751845
/ Publication No. US20050100928A1
/ GENERAL INFORMATION:
/ APPLICANT: Hedley, Mary Lynne
/ APPLICANT: Urban, Robert G.
/ APPLICANT: Chicz, Roman M.
/ TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
/ FILE REFERENCE: 08191-013001
/ CURRENT APPLICATION NUMBER: US/10/751,845
/ CURRENT FILING DATE: 2004-01-05
/ PRIOR APPLICATION NUMBER: US/09/664,225
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: US 60/169,846
/ PRIOR FILING DATE: 1999-12-09
/ PRIOR APPLICATION NUMBER: US 60/154,665
/ PRIOR FILING DATE: 1999-09-16
/ NUMBER OF SEQ ID NOS: 163
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 93
/ LENGTH: 10
/ TYPE: PRT
/ ORGANISM: Human Papilloma virus
US-10-751-845-93

Query Match 75.9%; Score 41; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.7;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
|||||

DB 1 EYRHYC 6

RESULT 40

US-10-425-115-249267
/ Sequence 249267, Application US/10425115
/ Publication No. US20040214272A1
/ GENERAL INFORMATION:
/ APPLICANT: La Rosa, Thomas J.
/ APPLICANT: Kovalic, David K.
/ APPLICANT: Zhou, Yihua
/ APPLICANT: Cao, Yongwei
/ TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
/ FILE REFERENCE: 38-21(53222)B
/ CURRENT APPLICATION NUMBER: US/10/425,115
/ CURRENT FILING DATE: 2003-04-28
/ NUMBER OF SEQ ID NOS: 369326
/ SEQ ID NO 249267
/ LENGTH: 112
/ TYPE: PRT
/ ORGANISM: Zea mays
/ FEATURE:
/ OTHER INFORMATION: Clone ID: MWT4577_158918C.1.pep
US-10-425-115-249267

Query Match 72.2%; Score 39; DB 4; Length 112;
Best Local Similarity 85.7%; Pred. No. 38;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 SEYRHYC 9
|||||

DB 91 STYRHYC 97

```
RESULT 41
US-10-425-115-308652
; Sequence 308652, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovacic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants
; FILE REFERENCE: 38-21(5322)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 308652
; LENGTH: 147
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(147)
; OTHER INFORMATION: unsure at all Xaa locations
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_44559C.1.pep
US-10-425-115-308652
```

```
Query Match          72.2%; Score 39; DB 4; Length 147;
Best Local Similarity 62.5%; Pred. No. 49;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      : |||||
DB      70 VQEVRRHC 77
```

```
RESULT 42
US-11-097-143-31596
; Sequence 31596, Application US/11097143
; Publication No. US20050208558A1
; GENERAL INFORMATION:
; APPLICANT: Venter, J. Craig
; APPLICANT: et al.
; TITLE OF INVENTION: DETECTION KIT, SUCH AS NUCLEIC ACID
; TITLE OF INVENTION: ARKAYS, FOR DETECTING EXPRESSION OF 10,000 OR MORE
; FILE REFERENCE: CL000728
; CURRENT APPLICATION NUMBER: US/11/097,143
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: 60/157,832
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: 60/160,191
; PRIOR FILING DATE: 1999-10-19
; PRIOR APPLICATION NUMBER: 60/161,932
; PRIOR FILING DATE: 1999-10-28
; PRIOR APPLICATION NUMBER: 60/164,769
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: 60/173,383
; PRIOR FILING DATE: 1999-12-28
; PRIOR APPLICATION NUMBER: 60/175,693
; PRIOR FILING DATE: 2000-01-12
; PRIOR APPLICATION NUMBER: 60/184,831
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/191,637
; PRIOR FILING DATE: 2000-03-23
; NUMBER OF SEQ ID NOS: 43008
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 31596
; LENGTH: 1815
; TYPE: PRT
; ORGANISM: DROSOPHILA
US-11-097-143-31596
```

```
Query Match          72.2%; Score 39; DB 6; Length 1815;
Best Local Similarity 85.7%; Pred. No. 5,3e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHY 8
      : |||||
DB      52 VSEYRHY 58
```

```
RESULT 43
US-09-809-391-640
; Sequence 640, Application US/09809391
; Publication No. US20030049618A1
; GENERAL INFORMATION:
; APPLICANT: Ruben et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P2
; CURRENT APPLICATION NUMBER: US/09/809,391
; CURRENT FILING DATE: 2001-03-16
; Prior application data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 761
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 640
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-809-391-640
```

```
Query Match          70.4%; Score 38; DB 3; Length 28;
Best Local Similarity 75.0%; Pred. No. 16;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      : |||||
DB      4 ISQLRHYC 11
```

```
RESULT 44
US-09-882-171-640
; Sequence 640, Application US/09882171
; Publication No. US20030175858A1
; GENERAL INFORMATION:
; APPLICANT: Ruben et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P2
; CURRENT APPLICATION NUMBER: US/09/882,171
; CURRENT FILING DATE: 2001-06-18
; PRIOR APPLICATION NUMBER: 09/809,391
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 09/149,476
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: PCT/US98/04493
; PRIOR FILING DATE: 1998-03-06
; PRIOR APPLICATION NUMBER: 60/040,162
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,333
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/038,621
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,626
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,334
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,336
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,163
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/047,600
; PRIOR FILING DATE: 1997-05-23
; PRIOR APPLICATION NUMBER: 60/047,615
; PRIOR FILING DATE: 1997-05-23
; PRIOR APPLICATION NUMBER: 60/047,597
; PRIOR FILING DATE: 1997-05-23
```


PRIOR APPLICATION NUMBER: 60/047,502	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,633	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,583	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,618	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,503	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,592	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,581	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,584	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,500	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,587	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,492	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,598	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,613	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,582	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,596	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,612	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,632	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/047,601	PRIOR FILING DATE: 1997-05-23	PRIOR APPLICATION NUMBER: 60/043,580	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,568	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,314	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,569	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,311	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,671	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,674	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,669	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,312	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,313	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,672	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/043,315	PRIOR FILING DATE: 1997-04-11	PRIOR APPLICATION NUMBER: 60/048,974	PRIOR FILING DATE: 1997-06-06	PRIOR APPLICATION NUMBER: 60/056,886	PRIOR FILING DATE: 1997-08-22	PRIOR APPLICATION NUMBER: 60/056,877	PRIOR FILING DATE: 1997-08-22	PRIOR APPLICATION NUMBER: 60/056,889	PRIOR FILING DATE: 1997-08-22	PRIOR APPLICATION NUMBER: 60/056,893	PRIOR FILING DATE: 1997-08-22	PRIOR APPLICATION NUMBER: 60/056,630	PRIOR FILING DATE: 1997-08-22
--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------	--------------------------------------	-------------------------------

1	PRIOR FILING DATE: 1997-08-22
2	PRIOR APPLICATION NUMBER: 60/056, 878
3	PRIOR FILING DATE: 1997-08-22
4	PRIOR APPLICATION NUMBER: 60/056, 662
5	PRIOR FILING DATE: 1997-08-22
6	PRIOR APPLICATION NUMBER: 60/056, 872
7	PRIOR FILING DATE: 1997-08-22
8	PRIOR APPLICATION NUMBER: 60/056, 882
9	PRIOR FILING DATE: 1997-08-22
10	PRIOR APPLICATION NUMBER: 60/056, 637
11	PRIOR FILING DATE: 1997-08-22
12	PRIOR APPLICATION NUMBER: 60/056, 903
13	PRIOR FILING DATE: 1997-08-22
14	PRIOR APPLICATION NUMBER: 60/056, 888
15	PRIOR FILING DATE: 1997-08-22
16	PRIOR APPLICATION NUMBER: 60/056, 879
17	PRIOR FILING DATE: 1997-08-22
18	PRIOR APPLICATION NUMBER: 60/056, 880
19	PRIOR FILING DATE: 1997-08-22
20	PRIOR APPLICATION NUMBER: 60/056, 894
21	PRIOR FILING DATE: 1997-08-22
22	PRIOR APPLICATION NUMBER: 60/056, 911
23	PRIOR FILING DATE: 1997-08-22
24	PRIOR APPLICATION NUMBER: 60/056, 636
25	PRIOR FILING DATE: 1997-08-22
26	PRIOR APPLICATION NUMBER: 60/056, 874
27	PRIOR FILING DATE: 1997-08-22
28	PRIOR APPLICATION NUMBER: 60/056, 910
29	PRIOR FILING DATE: 1997-08-22
30	PRIOR APPLICATION NUMBER: 60/056, 864
31	PRIOR FILING DATE: 1997-08-22
32	PRIOR APPLICATION NUMBER: 60/056, 631
33	PRIOR FILING DATE: 1997-08-22
34	PRIOR APPLICATION NUMBER: 60/056, 845
35	PRIOR FILING DATE: 1997-08-22
36	PRIOR APPLICATION NUMBER: 60/056, 892
37	PRIOR FILING DATE: 1997-08-22
38	PRIOR APPLICATION NUMBER: 60/057, 761
39	PRIOR FILING DATE: 1997-08-22
40	PRIOR APPLICATION NUMBER: 60/047, 555
41	PRIOR FILING DATE: 1997-05-23
42	PRIOR APPLICATION NUMBER: 60/047, 559
43	PRIOR FILING DATE: 1997-05-23
44	PRIOR APPLICATION NUMBER: 60/047, 588
45	PRIOR FILING DATE: 1997-05-23
46	PRIOR APPLICATION NUMBER: 60/047, 585
47	PRIOR FILING DATE: 1997-05-23
48	PRIOR APPLICATION NUMBER: 60/047, 586
49	PRIOR FILING DATE: 1997-05-23
50	PRIOR APPLICATION NUMBER: 60/047, 590
51	PRIOR FILING DATE: 1997-05-23
52	PRIOR APPLICATION NUMBER: 60/047, 593
53	PRIOR FILING DATE: 1997-05-23
54	PRIOR APPLICATION NUMBER: 60/047, 614
55	PRIOR FILING DATE: 1997-05-23
56	PRIOR APPLICATION NUMBER: 60/043, 578
57	PRIOR FILING DATE: 1997-04-11
58	PRIOR APPLICATION NUMBER: 60/043, 576
59	PRIOR FILING DATE: 1997-04-11
60	PRIOR APPLICATION NUMBER: 60/047, 501
61	PRIOR FILING DATE: 1997-05-23
62	PRIOR APPLICATION NUMBER: 60/043, 670
63	PRIOR FILING DATE: 1997-04-11
64	PRIOR APPLICATION NUMBER: 60/056, 632
65	PRIOR FILING DATE: 1997-08-22
66	PRIOR APPLICATION NUMBER: 60/056, 664
67	PRIOR FILING DATE: 1997-08-22
68	PRIOR APPLICATION NUMBER: 60/056, 876
69	PRIOR FILING DATE: 1997-08-22

PRIOR APPLICATION NUMBER: 60/056,881
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/056,909
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/056,875
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/056,862
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/056,887
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/056,908
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/048,964
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/057,650
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/056,884
PRIOR FILING DATE: 1997-08-22
PRIOR APPLICATION NUMBER: 60/057,669
PRIOR FILING DATE: 1997-09-05

Query Match 70.4%; Score 38; DB 3; Length 28;
Best Local Similarity 75.0%; Pred. No. 16;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
||:||||
Db 4 ISQLRHYC 11

RESULT 45
US-10-164-861-640
Sequence 640, Application US/10164861
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 186 Human Secreted proteins
FILE REFERENCE: PZ002P1
CURRENT APPLICATION NUMBER: US/10/164,861
CURRENT FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US/09/149,476
PRIOR FILING DATE: 1998-09-08
PRIOR APPLICATION NUMBER: PCT/US98/04493
PRIOR FILING DATE: 1998-03-06
NUMBER OF SEQ ID NOS: 757
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 640
LENGTH: 28
TYPE: PRT
ORGANISM: Homo sapiens
US-10-164-861-640

Query Match 70.4%; Score 38; DB 4; Length 28;
Best Local Similarity 75.0%; Pred. No. 16;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
||:||||
Db 4 ISQLRHYC 11

RESULT 46
US-10-264-237-2295
Sequence 2295, Application US/10264237
Publication No. US20040009491A1
GENERAL INFORMATION:
APPLICANT: Birse et al.
FILE REFERENCE: PAL1P1
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
CURRENT APPLICATION NUMBER: US/10/264,237
CURRENT FILING DATE: 2002-10-04
PRIOR APPLICATION NUMBER: PCT/US01/16450
PRIOR FILING DATE: 2001-05-18

PRIOR APPLICATION NUMBER: US 60/205,515
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 2876
SOFTWARE: PatentIn Ver. 3.1
SEQ ID NO 2295
LENGTH: 113
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MISC_FEATURE
LOCATION: (10)
OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids
US-10-264-237-2295

Query Match 70.4%; Score 38; DB 4; Length 113;
Best Local Similarity 55.6%; Pred. No. 58;
Matches 5; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHYC 9
:::||||:
Db 34 RYSEYRHYC 42

RESULT 47
US-10-408-765A-1288
Sequence 1288, Application US/10408765A
Publication No. US20040101874A1
GENERAL INFORMATION:
APPLICANT: Ghosh, Soumitra S.
APPLICANT: Fany, Boi D.
APPLICANT: Zhang, Bing
APPLICANT: Gibson, Bradford W.
APPLICANT: Taylor, Steven W.
APPLICANT: Glenn, Gary M.
APPLICANT: Warnock, Dale E.
TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
FILE REFERENCE: 660088.465
CURRENT APPLICATION NUMBER: US/10/408,765A
CURRENT FILING DATE: 2003-04-04
NUMBER OF SEQ ID NOS: 3077
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1288
LENGTH: 180
TYPE: PRT
ORGANISM: Homo sapiens
US-10-408-765A-1288

Query Match 70.4%; Score 38; DB 4; Length 180;
Best Local Similarity 75.0%; Pred. No. 90;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
||:||||
Db 64 ISQLRHYC 71

RESULT 48
US-10-001-054-40
Sequence 40, Application US/10001054
Publication No. US20020192209A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Baker, Kevin
APPLICANT: Goddard, Audrey
APPLICANT: Gurney, Austin
APPLICANT: Hebert, Carolyn
APPLICANT: Henzel, William
APPLICANT: Kabakoff, Rhona
APPLICANT: Shelton, David
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin
APPLICANT: Wood, William

TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITING NEOPLASTIC
FILE REFERENCE: P3034R1PCT
CURRENT APPLICATION NUMBER: US/10/001,054
CURRENT FILING DATE: 2001-11-30
PRIOR APPLICATION NUMBER: 60/059114
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079920
PRIOR FILING DATE: 1998-03-30
PRIOR APPLICATION NUMBER: 60/082999
PRIOR FILING DATE: 1998-04-24
PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/085149
PRIOR FILING DATE: 1998-05-12
PRIOR APPLICATION NUMBER: 60/087607
PRIOR FILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/088858
PRIOR FILING DATE: 1998-06-11
PRIOR APPLICATION NUMBER: 60/090691
PRIOR FILING DATE: 1998-06-25
PRIOR APPLICATION NUMBER: 60/096891
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: 60/096894
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: 60/099803
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/100263
PRIOR FILING DATE: 1998-09-14
PRIOR APPLICATION NUMBER: 60/100390
PRIOR FILING DATE: 1998-09-15
PRIOR APPLICATION NUMBER: 60/101476
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/107783
PRIOR FILING DATE: 1998-11-10
PRIOR APPLICATION NUMBER: 60/108849
PRIOR FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: 60/112420
PRIOR FILING DATE: 1998-12-15
PRIOR APPLICATION NUMBER: 60/113286
PRIOR FILING DATE: 1998-12-22
PRIOR APPLICATION NUMBER: 60/115554
PRIOR FILING DATE: 1999-01-12
PRIOR APPLICATION NUMBER: 60/115558
PRIOR FILING DATE: 1999-01-12
PRIOR APPLICATION NUMBER: 60/116533
PRIOR FILING DATE: 1999-01-20
PRIOR APPLICATION NUMBER: 60/123618
PRIOR FILING DATE: 1999-03-10
PRIOR APPLICATION NUMBER: 60/131294
PRIOR FILING DATE: 1999-04-07
PRIOR APPLICATION NUMBER: 60/140650
PRIOR FILING DATE: 1999-06-22
PRIOR APPLICATION NUMBER: 60/141037
PRIOR FILING DATE: 1999-06-23
PRIOR APPLICATION NUMBER: 60/144758
PRIOR FILING DATE: 1999-07-20
PRIOR APPLICATION NUMBER: 60/162506
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: 60/170262
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: 60/187202
PRIOR FILING DATE: 2000-03-03
PRIOR APPLICATION NUMBER: 60/209832
PRIOR FILING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: 60/232887
PRIOR FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: 09/180997
PRIOR FILING DATE: 1998-11-19
PRIOR APPLICATION NUMBER: 09/218517
PRIOR FILING DATE: 1998-12-22
PRIOR APPLICATION NUMBER: 09/284291
PRIOR FILING DATE: 1999-04-12
PRIOR APPLICATION NUMBER: 09/380137
PRIOR FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: 09/380138
PRIOR FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: 09/380913
PRIOR FILING DATE: 1999-09-09
PRIOR APPLICATION NUMBER: 09/403297
PRIOR FILING DATE: 1999-10-18
PRIOR APPLICATION NUMBER: 09/423741
PRIOR FILING DATE: 1999-11-10
PRIOR APPLICATION NUMBER: 09/709238
PRIOR FILING DATE: 2000-11-08
PRIOR APPLICATION NUMBER: 09/802706
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 09/866034
PRIOR FILING DATE: 2001-05-25
PRIOR APPLICATION NUMBER: 09/872035
PRIOR FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: 09/882636
PRIOR FILING DATE: 2001-06-14
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 09/924419
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: 09/927796
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: 09/929404
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: 09/941992
PRIOR FILING DATE: 2001-08-28
PRIOR APPLICATION NUMBER: 09/946374
PRIOR FILING DATE: 2001-09-04
PRIOR APPLICATION NUMBER: PCT/US98/18824
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/US99/00106
PRIOR FILING DATE: 1999-01-05
PRIOR APPLICATION NUMBER: PCT/US99/05028
PRIOR FILING DATE: 1999-03-08
PRIOR APPLICATION NUMBER: PCT/US99/08615
PRIOR FILING DATE: 1999-04-20
PRIOR APPLICATION NUMBER: PCT/US99/12252
PRIOR FILING DATE: 1999-06-02
PRIOR APPLICATION NUMBER: PCT/US99/20111
PRIOR FILING DATE: 1999-09-01
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28551
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28634
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00376
PRIOR FILING DATE: 2000-01-06
PRIOR APPLICATION NUMBER: PCT/US00/03565
PRIOR FILING DATE: 2000-02-11
PRIOR APPLICATION NUMBER: PCT/US00/04341
PRIOR FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/US00/04342
PRIOR FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/US00/05841
PRIOR FILING DATE: 2000-03-02
PRIOR APPLICATION NUMBER: PCT/US00/06884
PRIOR FILING DATE: 2000-03-15
PRIOR APPLICATION NUMBER: PCT/US00/08439
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: PCT/US00/13705

```

; PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: PCT/US00/14042
; PRIOR FILING DATE: 2000-05-22
; PRIOR APPLICATION NUMBER: PCT/US00/14941
; PRIOR FILING DATE: 2000-05-30
; PRIOR APPLICATION NUMBER: PCT/US00/15264
; PRIOR FILING DATE: 2000-06-02
; PRIOR APPLICATION NUMBER: PCT/US00/22031
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: PCT/US00/23522
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: PCT/US00/30873
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: PCT/US00/32678
; PRIOR FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: PCT/US01/06520
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: PCT/US01/06666
; PRIOR FILING DATE: 2001-03-01
; PRIOR APPLICATION NUMBER: PCT/US01/17092
; PRIOR FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: PCT/US01/17800
; PRIOR FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: PCT/US01/19692
; PRIOR FILING DATE: 2001-06-20
; PRIOR APPLICATION NUMBER: PCT/US01/21066
; PRIOR FILING DATE: 2001-06-29
; PRIOR APPLICATION NUMBER: PCT/US01/21735
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: PCT/US01/27099
; PRIOR FILING DATE: 2001-08-29
; NUMBER OF SEQ ID NOS: 91
; SEQ ID NO 40
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-001-054-40

Query Match      70.4%; Score 38; DB 4; Length 198;
Best Local Similarity 75.0%; Pred. No. 98;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      2 ISEYRHYC 9
DB      64 ISQLRHYC 71

RESULT 49
US-10-028-072-550
; Sequence 550, Application US/10028072
; Publication No. US20030004311A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Zhang
; APPLICANT: Wood, William
; TITLE OF INVENTION:
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/028,072
; CURRENT FILING DATE: 2001-12-19
```

```

; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059836
; PRIOR FILING DATE: 1997-09-24
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062285
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062814
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/062816
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063045
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063082
; PRIOR FILING DATE: 1997-10-31
; PRIOR APPLICATION NUMBER: 60/063127
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063327
; PRIOR FILING DATE: 1997-10-27
; PRIOR APPLICATION NUMBER: 60/063329
; PRIOR FILING DATE: 1997-10-27
; PRIOR APPLICATION NUMBER: 60/063550
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063561
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063704
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063733
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063735
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063738
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063755
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064248
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/064809
; PRIOR FILING DATE: 1997-11-07
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065846
; PRIOR FILING DATE: 1997-11-17
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/066453
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/066511
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/066770
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/069212
```

PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069278
PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069334
PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069694
PRIOR FILING DATE: 1997-12-16
PRIOR APPLICATION NUMBER: 60/072320
PRIOR FILING DATE: 1998-01-23
PRIOR APPLICATION NUMBER: 60/073612
PRIOR FILING DATE: 1998-02-04
PRIOR APPLICATION NUMBER: 60/074086
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: 60/074092
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079663
PRIOR FILING DATE: 1998-02-27
PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/080165
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/081203
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081229
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081695
PRIOR FILING DATE: 1998-04-14
PRIOR APPLICATION NUMBER: 60/081817
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081818
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082999
PRIOR FILING DATE: 1998-04-24
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085149
PRIOR FILING DATE: 1998-05-12
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/086414
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/086430
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/087106
PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 60/088026
PRIOR FILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088730
PRIOR FILING DATE: 1998-06-10

PRIOR APPLICATION NUMBER: 60/088741
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088810
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088858
PRIOR FILING DATE: 1998-06-11
PRIOR APPLICATION NUMBER: 60/089532
PRIOR FILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089599
PRIOR FILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089907
PRIOR FILING DATE: 1998-06-18
PRIOR APPLICATION NUMBER: 60/089947
PRIOR FILING DATE: 1998-06-19
PRIOR APPLICATION NUMBER: 60/090349
PRIOR FILING DATE: 1998-06-23
PRIOR APPLICATION NUMBER: 60/090429
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090445
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090538
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090863
PRIOR FILING DATE: 1998-06-26
PRIOR APPLICATION NUMBER: 60/091360
PRIOR FILING DATE: 1998-07-01
PRIOR APPLICATION NUMBER: 60/091519
PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091982
PRIOR FILING DATE: 1998-07-07

Query Match 70.4%; Score 38; DB 4; Length 198;
Best Local Similarity 75.0%; Pred. No. 98;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 ISEVRYHC 9
Db 64 ISQLRHYC 71

RESULT 50
US-10-140-808-550

Sequence 550, Application US/10140808
Publication No. US20030017563A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerlitsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C182
CURRENT FILING DATE: 2002-05-07
Prior Application removed - See File Wrapper or Palm
SEQ ID NO 550
LENGTH: 198
TYPE: PRT
ORGANISM: Homo Sapien

US-10-140-808-550

Query Match 70.4%; Score 38; DB 4; Length 198;
 Best Local Similarity 75.0%; Pred. No. 98;
 Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 2 ISEYRHYC 9
 ||: |||
 Db 64 ISQLRHYC 71

Search completed: May 5, 2006, 08:07:39
 Job time : 67 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 BioCeleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 07:56:56 ; Search time 8.4 Seconds
(without alignments)
49.591 Million cell updates/sec

Title: US-08-170-344-11

Perfect score: 54
Sequence: 1 KISEYRHYC 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :

Published Applications AA New:
1: /SIDSS/ptodata/1/pubppa/US08_NEW_PUB.pep1.*
2: /SIDSS/ptodata/1/pubppa/US06_NEW_PUB.pep.*
3: /SIDSS/ptodata/1/pubppa/US07_NEW_PUB.pep.*
4: /SIDSS/ptodata/1/pubppa/US08_NEW_PUB.pep.*
5: /SIDSS/ptodata/1/pubppa/PCR_NEW_PUB.pep.*
6: /SIDSS/ptodata/1/pubppa/US09_NEW_PUB.pep.*
7: /SIDSS/ptodata/1/pubppa/US10_NEW_PUB.pep.*
8: /SIDSS/ptodata/1/pubppa/US11_NEW_PUB.pep.*
9: /SIDSS/ptodata/1/pubppa/US10_NEW_PUB.pep1.*
10: /SIDSS/ptodata/1/pubppa/US11_NEW_PUB.pep.*
11: /SIDSS/ptodata/1/pubppa/US11_NEW_PUB.pep1.*
12: /SIDSS/ptodata/1/pubppa/US60_NEW_PUB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	54	100.0	10	9	US-10-530-061-506
2	54	100.0	151	9	US-10-530-253-13
3	54	100.0	158	11	US-11-206-138-3
4	54	100.0	248	9	US-10-530-253-1
5	54	100.0	248	9	US-10-530-253-3
6	54	100.0	248	9	US-10-530-253-5
7	54	100.0	248	9	US-10-530-253-7
8	54	100.0	248	9	US-10-530-253-9
9	54	100.0	248	9	US-10-530-253-11
10	54	100.0	256	11	US-11-192-923A-2
11	50	92.6	10	9	US-10-530-061-505
12	45	83.3	10	9	US-10-530-061-40
13	45	83.3	10	9	US-10-530-061-475
14	45	83.3	10	9	US-10-530-061-554
15	45	83.3	10	9	US-10-530-061-599
16	45	83.3	10	9	US-10-530-061-775
17	45	83.3	148	9	US-10-530-253-22
18	45	83.3	149	9	US-10-530-253-17
19	45	83.3	149	9	US-10-530-253-24
20	44	81.5	10	9	US-10-530-061-598
21	41	75.9	10	9	US-10-530-061-124

22	41	75.9	10	9	US-10-530-061-553	Sequence 553, App
23	41	75.9	10	9	US-10-530-061-850	Sequence 850, App
24	40	74.1	9	9	US-10-530-061-41	Sequence 41, App1
25	40	74.1	9	9	US-10-530-061-122	Sequence 122, App
26	40	74.1	9	9	US-10-530-061-776	Sequence 776, App
27	40	74.1	10	9	US-10-530-061-54	Sequence 54, App1
28	38	70.4	28	11	US-11-144-947-640	Sequence 640, App
29	38	70.4	198	9	US-10-131-826A-550	Sequence 550, App
30	38	70.4	198	9	US-10-973-115B-550	Sequence 550, App
31	38	70.4	198	9	US-10-218-784-226	Sequence 226, App
32	38	70.4	198	9	US-10-219-061-226	Sequence 226, App
33	38	70.4	198	9	US-10-219-062-226	Sequence 226, App
34	38	70.4	198	9	US-10-219-064-226	Sequence 226, App
35	38	70.4	198	9	US-10-233-134-226	Sequence 226, App
36	38	70.4	198	9	US-10-137-873A-550	Sequence 550, App
37	38	70.4	198	9	US-10-152-370-550	Sequence 550, App
38	38	70.4	198	11	US-11-280-153-550	Sequence 550, App
39	37	68.5	9	9	US-10-530-061-71	Sequence 71, App1
40	37	68.5	9	9	US-10-530-061-72	Sequence 72, App1
41	37	68.5	9	9	US-10-530-061-73	Sequence 73, App1
42	37	68.5	9	9	US-10-530-061-74	Sequence 74, App1
43	37	68.5	9	9	US-10-530-061-121	Sequence 121, App
44	37	68.5	9	9	US-10-530-061-123	Sequence 123, App
45	35	64.8	17	9	US-10-519-122-78	Sequence 78, App1
46	35	64.8	45	11	US-11-256-548-11	Sequence 11, App1
47	35	64.8	123	11	US-11-172-610-10	Sequence 10, App1
48	35	64.8	149	9	US-10-530-253-18	Sequence 18, App1
49	34	63.0	10	9	US-10-530-061-128	Sequence 128, App
50	34	63.0	10	9	US-10-530-061-853	Sequence 853, App
51	34	63.0	106	11	US-11-172-140-1328	Sequence 1328, App
52	34	63.0	235	11	US-11-096-568A-30604	Sequence 30604, A
53	34	63.0	296	11	US-11-096-568A-27880	Sequence 27880, A
54	34	63.0	327	11	US-11-096-568A-27879	Sequence 27879, A
55	34	63.0	328	9	US-10-974-127A-48	Sequence 48, App1
56	34	63.0	360	9	US-10-974-127A-47	Sequence 47, App1
57	34	63.0	368	11	US-11-096-568A-27878	Sequence 27878, A
58	34	63.0	418	11	US-11-244-219-2	Sequence 2, App1
59	34	63.0	420	9	US-10-974-127A-45	Sequence 45, App1
60	34	63.0	420	9	US-10-974-127A-45	Sequence 45, App1
61	33	61.1	125	11	US-11-079-463-5485	Sequence 5485, App
62	33	61.1	130	9	US-10-485-517-207	Sequence 207, App
63	33	61.1	133	9	US-10-793-626-1962	Sequence 1962, App
64	33	61.1	193	11	US-11-079-463-8253	Sequence 8253, App
65	33	61.1	292	11	US-11-079-463-9800	Sequence 9800, App
66	33	61.1	304	11	US-11-087-099-11063	Sequence 11063, A
67	33	61.1	304	11	US-11-087-099-11063	Sequence 11063, A
68	33	61.1	310	11	US-11-096-568A-25859	Sequence 25859, A
69	33	61.1	310	11	US-11-096-568A-25859	Sequence 25859, A
70	33	61.1	386	11	US-11-188-298-1606	Sequence 1606, App
71	33	61.1	416	11	US-11-079-463-6100	Sequence 6100, App
72	33	61.1	416	11	US-11-087-099-1321	Sequence 1321, App
73	33	61.1	456	9	US-10-860-501-5	Sequence 5, App1
74	33	61.1	456	9	US-10-860-501-5	Sequence 5, App1
75	33	61.1	493	11	US-11-079-463-8790	Sequence 8790, App
76	33	61.1	500	9	US-10-860-501-4	Sequence 4, App1
77	33	61.1	500	9	US-10-956-882-4	Sequence 882, App
78	33	61.1	532	9	US-10-860-501-7	Sequence 7, App1
79	33	61.1	532	9	US-10-860-501-7	Sequence 7, App1
80	33	61.1	3574	11	US-11-000-463-554	Sequence 454, App
81	32	59.3	216	11	US-11-079-463-6503	Sequence 6503, App
82	32	59.3	9	9	US-10-530-061-99	Sequence 99, App1
83	32	59.3	10	9	US-10-530-061-125	Sequence 125, App
84	32	59.3	10	9	US-10-530-061-127	Sequence 127, App
85	32	59.3	10	9	US-10-530-061-851	Sequence 851, App
86	32	59.3	10	9	US-10-530-061-852	Sequence 852, App
87	32	59.3	53	11	US-11-000-463-412	Sequence 412, App
88	32	59.3	53	11	US-11-000-463-412	Sequence 412, App
89	32	59.3	97	11	US-11-087-099-5182	Sequence 884, App
90	32	59.3	151	9	US-10-530-253-21	Sequence 21, App1
91	32	59.3	178	9	US-10-506-454-1163	Sequence 1163, App
92	32	59.3	205	11	US-11-087-099-1075	Sequence 1075, App
93	32	59.3	215	11	US-11-087-099-11194	Sequence 11194, A
94	32	59.3	240	9	US-10-745-586-156	Sequence 156, App

95	32	59.3	346	11	US-11-188-298-5425	Sequence 8425, Ap
96	32	59.3	491	11	US-11-188-298-18885	Sequence 18885, A
97	32	59.3	779	11	US-11-188-298-12100	Sequence 12100, A
98	32	59.3	779	11	US-11-188-298-14343	Sequence 14343, A
99	32	59.3	816	11	US-11-090-439-48	Sequence 48, Appl
100	32	59.3	1327	11	US-11-019-711-70	Sequence 70, Appl
101	31	57.4	82	9	US-10-467-657-2762	Sequence 2762, Ap
102	31	57.4	85	9	US-10-491-468-35	Sequence 35, Appl
103	31	57.4	106	11	US-11-079-463-8063	Sequence 8063, Ap
104	31	57.4	198	11	US-11-096-568A-25699	Sequence 25699, A
105	31	57.4	220	11	US-11-096-568A-25698	Sequence 25698, A
106	31	57.4	261	11	US-11-188-298-8541	Sequence 8541, A
107	31	57.4	302	11	US-11-096-568A-12025	Sequence 12025, A
108	31	57.4	304	11	US-11-096-568A-12024	Sequence 12024, A
109	31	57.4	370	11	US-11-096-568A-12023	Sequence 12023, A
110	31	57.4	374	9	US-10-520-820-4	Sequence 4, Appl1
111	31	57.4	385	11	US-11-074-176-192	Sequence 192, Ap
112	31	57.4	385	11	US-11-079-463-8385	Sequence 8385, Ap
113	31	57.4	566	11	US-11-188-298-6791	Sequence 6791, Ap
114	31	57.4	759	11	US-11-087-039-3393	Sequence 3393, Ap
115	31	57.4	809	11	US-11-087-039-12454	Sequence 12454, A
116	31	57.4	886	11	US-11-188-298-17978	Sequence 17978, A
117	31	57.4	988	11	US-11-207-078-112	Sequence 112, Ap
118	31	57.4	1068	9	US-10-902-137-8	Sequence 8, Appl1
119	30	55.6	10	9	US-10-530-061-60	Sequence 60, Appl
120	30	55.6	10	9	US-10-530-061-118	Sequence 118, Ap
121	30	55.6	10	9	US-10-530-061-479	Sequence 479, Ap
122	30	55.6	10	9	US-10-530-061-503	Sequence 503, Ap
123	30	55.6	10	9	US-10-530-061-539	Sequence 539, Ap
124	30	55.6	10	9	US-10-530-061-551	Sequence 551, Ap
125	30	55.6	10	9	US-10-530-061-596	Sequence 596, Ap
126	30	55.6	10	9	US-10-530-061-596	Sequence 596, Ap
127	30	55.6	13	11	US-11-041-893-83	Sequence 83, Appl
128	30	55.6	37	9	US-10-467-657-4412	Sequence 4412, Ap
129	30	55.6	91	11	US-11-126-126-10	Sequence 10, Appl
130	30	55.6	94	11	US-11-126-126-14	Sequence 14, Appl
131	30	55.6	99	11	US-11-172-740-1324	Sequence 1324, Ap
132	30	55.6	101	11	US-11-126-126-12	Sequence 12, Appl
133	30	55.6	105	11	US-11-096-568A-7047	Sequence 7047, Ap
134	30	55.6	106	11	US-11-126-126-4	Sequence 4, Appl1
135	30	55.6	106	11	US-11-126-126-8	Sequence 8, Appl1
136	30	55.6	107	9	US-10-467-657-6644	Sequence 6644, Ap
137	30	55.6	109	11	US-11-126-126-6	Sequence 6, Appl1
138	30	55.6	109	11	US-11-087-039-3210	Sequence 3210, Ap
139	30	55.6	110	9	US-10-467-657-5636	Sequence 5636, Ap
140	30	55.6	110	11	US-11-072-512-3086	Sequence 3086, Ap
141	30	55.6	128	11	US-11-096-568A-1144	Sequence 1144, Ap
142	30	55.6	148	11	US-11-075-185-22	Sequence 22, Appl
143	30	55.6	149	9	US-10-530-253-16	Sequence 16, Appl
144	30	55.6	161	11	US-11-126-126-2	Sequence 2, Appl1
145	30	55.6	161	11	US-11-057-923-3	Sequence 3, Appl1
146	30	55.6	180	11	US-11-096-568A-7046	Sequence 7046, Ap
147	30	55.6	181	11	US-11-098-666-10422	Sequence 10422, A
148	30	55.6	189	11	US-11-096-568A-7045	Sequence 7045, Ap
149	30	55.6	193	11	US-11-096-568A-1143	Sequence 1143, Ap
150	30	55.6	201	11	US-11-096-568A-1142	Sequence 1142, Ap
151	30	55.6	214	9	US-10-927-641-70	Sequence 70, Appl
152	30	55.6	221	7	US-09-978-360A-436	Sequence 436, Ap
153	30	55.6	222	9	US-10-467-657-7608	Sequence 7608, Ap
154	30	55.6	252	11	US-11-096-568A-6870	Sequence 6870, Ap
155	30	55.6	253	11	US-11-188-298-5895	Sequence 5895, Ap
156	30	55.6	269	9	US-10-467-657-2198	Sequence 2198, Ap
157	30	55.6	284	8	US-10-821-234-1280	Sequence 1280, Ap
158	30	55.6	289	8	US-10-505-928-375	Sequence 375, Ap
159	30	55.6	290	9	US-10-933-626-3024	Sequence 3024, Ap
160	30	55.6	290	9	US-10-933-626-3252	Sequence 3252, Ap
161	30	55.6	290	9	US-11-188-298-15549	Sequence 15549, A
162	30	55.6	307	11	US-11-172-740-2197	Sequence 2197, Ap
163	30	55.6	308	11	US-11-188-298-3745	Sequence 3745, A
164	30	55.6	308	11	US-11-188-298-10390	Sequence 10390, A
165	30	55.6	308	11	US-11-188-298-15926	Sequence 15926, A
166	30	55.6	308	11	US-11-188-298-20337	Sequence 20337, A
167	30	55.6	308	11	US-11-188-298-20337	Sequence 20337, A

241	29	53.7	158	9	US-10-530-253-15	Sequence 15, Appl	314	29	53.7	595	11	US-11-188-298-9951	Sequence 9951, Ap
242	29	53.7	158	11	US-11-172-740-1014	Sequence 1014, Ap	315	29	53.7	598	11	US-11-188-298-909	Sequence 909, Ap
243	29	53.7	161	11	US-11-172-740-1018	Sequence 1018, Ap	316	29	53.7	598	11	US-11-188-298-17271	Sequence 17271, A
244	29	53.7	168	9	US-10-793-626-2430	Sequence 2430, Ap	317	29	53.7	598	11	US-11-188-298-10619	Sequence 20619, A
245	29	53.7	169	11	US-11-172-740-1015	Sequence 1015, Ap	318	29	53.7	599	9	US-10-995-561-812	Sequence 812, Ap
246	29	53.7	172	11	US-11-172-740-1026	Sequence 1026, Ap	319	29	53.7	600	11	US-11-188-298-2903	Sequence 2903, Ap
247	29	53.7	179	9	US-10-873-528-87	Sequence 87, Appl	320	29	53.7	600	11	US-11-188-298-9440	Sequence 9440, Ap
248	29	53.7	179	11	US-11-172-740-1023	Sequence 1023, Ap	321	29	53.7	602	11	US-11-188-298-554	Sequence 554, Ap
249	29	53.7	185	11	US-11-096-568A-25833	Sequence 25833, A	322	29	53.7	616	11	US-11-188-298-13709	Sequence 13709, A
250	29	53.7	193	9	US-10-467-657-2700	Sequence 2700, Ap	323	29	53.7	616	11	US-11-188-298-17673	Sequence 17673, A
251	29	53.7	202	9	US-10-330-773-145	Sequence 145, App	324	29	53.7	620	11	US-11-188-298-1043	Sequence 1043, Ap
252	29	53.7	215	11	US-11-087-099-5517	Sequence 5517, Ap	325	29	53.7	632	11	US-11-188-298-978	Sequence 978, Ap
253	29	53.7	242	11	US-11-096-568A-236	Sequence 236, App	326	29	53.7	698	9	US-10-995-561-939	Sequence 939, App
254	29	53.7	247	11	US-11-224-624-138	Sequence 138, App	327	29	53.7	725	9	US-10-995-561-938	Sequence 22164, A
255	29	53.7	253	11	US-11-087-099-2814	Sequence 2814, Ap	328	29	53.7	831	11	US-11-188-298-172164	Sequence 5245, Ap
256	29	53.7	253	11	US-11-096-568A-25887	Sequence 25887, A	329	29	53.7	857	11	US-11-079-463-5245	Sequence 584, Appl
257	29	53.7	267	9	US-10-793-626-882	Sequence 882, App	330	29	53.7	864	11	US-11-053-100-58	Sequence 733, App
258	29	53.7	279	11	US-11-096-568A-25886	Sequence 25886, A	331	29	53.7	893	8	US-10-505-928-733	Sequence 2, Appl1
259	29	53.7	308	9	US-10-995-561-814	Sequence 814, App	332	29	53.7	953	9	US-10-965-846-2	Sequence 7130, Ap
259	29	53.7	308	9	US-10-995-561-814	Sequence 814, App	333	29	53.7	989	11	US-11-079-463-7130	Sequence 9508, Ap
260	29	53.7	308	11	US-11-188-298-21758	Sequence 21758, A	334	29	53.7	1102	11	US-11-079-463-9508	Sequence 9508, Ap
261	29	53.7	319	9	US-10-793-626-792	Sequence 792, App	335	29	53.7	1179	9	US-10-204-639-4	Sequence 4, Appl1
262	29	53.7	319	9	US-10-793-626-2008	Sequence 2008, Ap	336	29	53.7	1479	9	US-10-877-346-61	Sequence 61, Appl1
263	29	53.7	339	11	US-11-188-298-9710	Sequence 9710, Ap	337	29	53.7	1608	9	US-10-877-346-61	Sequence 60, Appl1
264	29	53.7	340	11	US-11-096-568A-235	Sequence 235, App	338	29	53.7	1788	9	US-10-877-346-60	Sequence 13, Appl1
265	29	53.7	340	11	US-11-096-568A-537	Sequence 237, App	339	29	53.7	1896	9	US-10-877-346-13	Sequence 44, Appl1
266	29	53.7	344	11	US-11-096-568A-5041	Sequence 9041, Ap	340	29	53.7	2405	9	US-10-877-346-44	Sequence 63, Appl1
267	29	53.7	345	11	US-11-096-568A-234	Sequence 234, App	341	29	53.7	2811	9	US-10-877-346-63	Sequence 27, Appl1
268	29	53.7	345	11	US-11-096-568A-25885	Sequence 25885, A	342	29	53.7	2814	9	US-10-877-346-25	Sequence 25, Appl1
269	29	53.7	347	11	US-11-079-463-6594	Sequence 6594, Ap	343	29	53.7	4886	11	US-11-004-399-714	Sequence 714, App
270	29	53.7	347	11	US-11-188-298-4593	Sequence 4593, Ap	344	29	53.7	16	11	US-11-054-545-2891	Sequence 2891, Ap
271	29	53.7	351	11	US-11-096-568A-31706	Sequence 31706, A	345	28	51.9	16	11	US-11-266-444-2891	Sequence 2831, Ap
272	29	53.7	358	11	US-11-096-568A-31705	Sequence 31705, A	346	28	51.9	17	11	US-11-054-515-2831	Sequence 2831, Ap
273	29	53.7	368	11	US-11-188-298-14727	Sequence 14727, A	347	28	51.9	17	11	US-11-266-444-2831	Sequence 2831, Ap
274	29	53.7	369	9	US-10-501-035-281	Sequence 281, App	348	28	51.9	19	9	US-10-501-411A-253	Sequence 253, App
275	29	53.7	371	11	US-11-096-568A-9040	Sequence 9040, Ap	349	28	51.9	35	11	US-11-121-301-77	Sequence 77, Appl1
276	29	53.7	371	11	US-11-096-568A-5043	Sequence 9043, Ap	350	28	51.9	58	11	US-11-000-463-259	Sequence 259, App
277	29	53.7	380	11	US-11-087-099-3778	Sequence 3778, Ap	351	28	51.9	64	11	US-11-000-463-731	Sequence 731, App
278	29	53.7	380	11	US-11-188-298-1561	Sequence 1561, Ap	352	28	51.9	64	11	US-11-000-463-731	Sequence 13999, A
279	29	53.7	380	11	US-11-188-298-4944	Sequence 4944, Ap	353	28	51.9	64	11	US-11-000-463-731	Sequence 4790, Ap
280	29	53.7	389	11	US-11-096-568A-31704	Sequence 31704, A	354	28	51.9	75	11	US-11-096-568A-13999	Sequence 7789, Ap
281	29	53.7	390	11	US-11-079-463-8978	Sequence 8978, Ap	355	28	51.9	82	9	US-10-467-657-4790	Sequence 6046, Ap
282	29	53.7	394	9	US-10-821-234-1626	Sequence 1626, Ap	356	28	51.9	94	11	US-11-079-463-7789	Sequence 7867, Ap
283	29	53.7	407	9	US-10-995-561-811	Sequence 811, App	357	28	51.9	125	11	US-11-188-298-6046	Sequence 793, App
284	29	53.7	419	29	US-11-205-225-4	Sequence 4, Appl1	358	28	51.9	142	9	US-10-467-657-7870	Sequence 7870, Ap
285	29	53.7	427	9	US-10-485-788A-503	Sequence 503, Appl1	359	28	51.9	142	11	US-11-045-004-1795	Sequence 490, App
286	29	53.7	437	11	US-11-079-463-9024	Sequence 9024, Ap	360	28	51.9	152	11	US-11-172-740-793	Sequence 4112, Ap
287	29	53.7	438	9	US-10-641-678-49	Sequence 49, Appl1	361	28	51.9	153	7	US-09-978-360A-490	Sequence 370, App
288	29	53.7	447	11	US-11-109-156-30	Sequence 30, Appl1	362	28	51.9	153	9	US-10-467-657-4112	Sequence 370, App
289	29	53.7	447	11	US-11-112-882-4	Sequence 815, Appl1	363	28	51.9	157	9	US-10-195-883-370	Sequence 370, App
290	29	53.7	450	9	US-10-995-561-815	Sequence 815, App	364	28	51.9	157	9	US-10-195-883-370	Sequence 370, App
291	29	53.7	459	11	US-11-143-984A-31	Sequence 31, Appl1	365	28	51.9	157	9	US-10-195-883-370	Sequence 370, App
292	29	53.7	497	9	US-10-793-626-2812	Sequence 2812, Ap	366	28	51.9	157	9	US-10-195-883-370	Sequence 370, App
293	29	53.7	500	11	US-11-188-298-8310	Sequence 8310, Ap	367	28	51.9	157	9	US-11-188-298-17711	Sequence 17711, A
294	29	53.7	501	11	US-11-188-298-18819	Sequence 18819, A	368	28	51.9	168	11	US-11-188-298-22428	Sequence 22428, A
295	29	53.7	501	11	US-11-188-298-19950	Sequence 19950, A	369	28	51.9	170	11	US-11-172-740-794	Sequence 794, App
296	29	53.7	502	11	US-11-188-298-18656	Sequence 18656, A	370	28	51.9	187	9	US-10-467-657-1656	Sequence 792, Appl1
297	29	53.7	507	9	US-10-467-657-630	Sequence 630, App	371	28	51.9	172	11	US-11-205-225-7	Sequence 6, Appl1
298	29	53.7	519	11	US-11-096-568A-29569	Sequence 29569, A	372	28	51.9	178	11	US-11-087-099-2828	Sequence 2828, Ap
299	29	53.7	525	11	US-11-096-568A-29568	Sequence 29568, A	373	28	51.9	179	11	US-11-188-298-13715	Sequence 13715, A
300	29	53.7	532	11	US-11-096-568A-29568	Sequence 29568, A	374	28	51.9	187	9	US-10-467-657-1656	Sequence 1636, Ap
301	29	53.7	532	9	US-10-511-989-182	Sequence 182, App	375	28	51.9	192	8	US-10-505-928-578	Sequence 578, App
302	29	53.7	533	11	US-11-087-099-1589	Sequence 1589, Ap	376	28	51.9	192	8	US-11-072-175-193	Sequence 193, App
303	29	53.7	540	11	US-11-188-298-12492	Sequence 12492, A	377	28	51.9	196	8	US-10-505-928-686	Sequence 686, App
304	29	53.7	540	11	US-11-087-099-12488	Sequence 12488, Ap	378	28	51.9	196	8	US-11-072-175-207	Sequence 207, App
305	29	53.7	540	11	US-11-188-298-21979	Sequence 21979, A	379	28	51.9	220	11	US-11-098-686-10677	Sequence 10677, A
306	29	53.7	542	11	US-11-188-298-19131	Sequence 19131, A	380	28	51.9	224	11	US-11-096-568A-18400	Sequence 18400, A
307	29	53.7	543	11	US-11-096-568A-28133	Sequence 28133, A	381	28	51.9	224	11	US-11-096-568A-18399	Sequence 18399, A
308	29	53.7	543	11	US-11-096-568A-29567	Sequence 29567, A	382	28	51.9	224	11	US-11-045-004-1680	Sequence 1680, Ap
309	29	53.7	548	9	US-10-995-561-810	Sequence 810, App	383	28	51.9	226	11	US-11-172-740-1334	Sequence 1334, Ap
310	29	53.7	553	11	US-11-188-298-4984	Sequence 4984, Ap	384	28	51.9	246	11	US-11-240-769-73	Sequence 73, Appl1
311	29	53.7	566	9	US-11-096-568A-28132	Sequence 28132, A	385	28	51.9				
312	29	53.7	567	11	US-10-995-561-813	Sequence 813, App	386	28	51.9				
313	29	53.7	582	11	US-11-205-225-10	Sequence 10, Appl1							

387	28	51.9	248	11	US-11-054-515-959	Sequence 959, App	460	28	51.9	447	11	US-11-049-348-6	Sequence 6, App11
388	28	51.9	248	11	US-11-266-444-959	Sequence 959, App	461	28	51.9	448	11	US-11-096-668A-18364	Sequence 18364, A
389	28	51.9	251	9	US-10-793-626-298	Sequence 298, App	462	28	51.9	455	11	US-11-088-686-10297	Sequence 10297, A
390	28	51.9	251	9	US-10-793-626-722	Sequence 722, App	463	28	51.9	459	11	US-11-087-099-9854	Sequence 9854, App
391	28	51.9	253	9	US-10-509-691-2	Sequence 2, App11	464	28	51.9	462	11	US-11-096-568A-12786	Sequence 12786, A
392	28	51.9	253	11	US-11-054-515-1530	Sequence 1530, App	465	28	51.9	472	11	US-11-188-298-10453	Sequence 10453, A
393	28	51.9	253	11	US-11-054-515-1850	Sequence 1850, App	466	28	51.9	474	11	US-11-222-641-8	Sequence 8, App11
394	28	51.9	253	11	US-11-054-515-1859	Sequence 1859, App	467	28	51.9	476	11	US-11-057-012-70	Sequence 70, App1
395	28	51.9	253	11	US-11-266-444-1530	Sequence 1530, App	468	28	51.9	477	11	US-11-188-298-4271	Sequence 4271, App
396	28	51.9	253	11	US-11-266-444-1850	Sequence 1850, App	469	28	51.9	482	11	US-11-086-568A-3044	Sequence 3044, App
397	28	51.9	253	11	US-11-266-444-1859	Sequence 1859, App	470	28	51.9	497	11	US-11-087-099-3119	Sequence 3119, App
398	28	51.9	257	11	US-11-045-004-670	Sequence 670, App	471	28	51.9	502	11	US-11-172-740-2436	Sequence 2436, App
399	28	51.9	259	11	US-11-188-298-805	Sequence 805, App	472	28	51.9	512	11	US-11-087-099-1062	Sequence 1062, App
400	28	51.9	280	11	US-11-096-568A-22848	Sequence 22848, App	473	28	51.9	522	11	US-11-054-281-124	Sequence 124, App
401	28	51.9	282	11	US-11-072-512-3069	Sequence 3069, App	474	28	51.9	522	11	US-11-054-281-125	Sequence 125, App
402	28	51.9	292	11	US-11-079-463-7154	Sequence 7154, App	475	28	51.9	523	11	US-11-054-281-122	Sequence 122, App
403	28	51.9	293	9	US-10-506-454-1000	Sequence 1000, App	476	28	51.9	523	11	US-11-054-281-123	Sequence 123, App
404	28	51.9	293	11	US-11-087-099-6345	Sequence 6345, App	477	28	51.9	524	11	US-11-054-281-94	Sequence 34, App1
405	28	51.9	300	11	US-11-096-568A-7455	Sequence 7455, App	478	28	51.9	524	11	US-11-054-281-121	Sequence 121, App
406	28	51.9	301	9	US-10-512-184-37	Sequence 37, App1	479	28	51.9	531	11	US-11-172-740-446	Sequence 446, App
407	28	51.9	302	11	US-11-045-004-964	Sequence 964, App	480	28	51.9	533	9	US-10-873-528-60	Sequence 60, App1
408	28	51.9	303	11	US-11-058-924-5	Sequence 5, App11	481	28	51.9	551	11	US-11-087-099-8478	Sequence 8478, App
409	28	51.9	303	11	US-11-072-512-3897	Sequence 3897, App	482	28	51.9	554	11	US-11-000-663-240	Sequence 240, App
410	28	51.9	304	11	US-11-188-298-9075	Sequence 9075, App	483	28	51.9	559	11	US-11-087-099-6344	Sequence 6344, App
411	28	51.9	308	11	US-11-096-568A-22847	Sequence 22847, A	484	28	51.9	566	11	US-11-188-298-17417	Sequence 17417, A
412	28	51.9	311	11	US-11-079-463-6123	Sequence 6123, App	485	28	51.9	568	11	US-11-049-348-5	Sequence 5, App1
413	28	51.9	316	11	US-11-058-924-2	Sequence 2, App11	486	28	51.9	569	9	US-10-512-184-66	Sequence 66, App1
414	28	51.9	317	11	US-11-205-225-2	Sequence 2, App11	487	28	51.9	576	9	US-10-512-184-65	Sequence 65, App1
415	28	51.9	317	11	US-11-096-568A-14785	Sequence 14785, A	488	28	51.9	582	11	US-11-087-099-11292	Sequence 11292, A
416	28	51.9	318	11	US-11-096-568A-14784	Sequence 14784, A	489	28	51.9	582	11	US-11-188-298-21430	Sequence 21430, A
417	28	51.9	327	11	US-11-096-568A-14783	Sequence 14783, A	490	28	51.9	598	11	US-10-873-477A-31	Sequence 31, App1
418	28	51.9	332	11	US-11-096-568A-17212	Sequence 17212, A	491	28	51.9	598	11	US-11-074-176-258	Sequence 258, App
419	28	51.9	334	11	US-11-096-568A-17212	Sequence 17212, A	492	28	51.9	601	9	US-10-995-561-993	Sequence 993, App
420	28	51.9	336	11	US-11-045-004-1809	Sequence 1809, App	493	28	51.9	615	9	US-10-512-184-50	Sequence 50, App1
421	28	51.9	338	11	US-11-096-568A-17211	Sequence 17211, A	494	28	51.9	618	9	US-10-512-184-48	Sequence 48, App1
422	28	51.9	339	11	US-11-188-298-21357	Sequence 21357, A	495	28	51.9	623	11	US-11-087-099-5188	Sequence 5188, A
423	28	51.9	358	10	US-10-370-959-146	Sequence 146, App	496	28	51.9	624	11	US-11-188-298-13519	Sequence 13519, A
424	28	51.9	350	11	US-11-188-298-7359	Sequence 7359, App	497	28	51.9	625	9	US-10-512-184-44	Sequence 44, App1
425	28	51.9	350	11	US-11-188-298-12259	Sequence 12259, App	498	28	51.9	625	9	US-10-512-184-49	Sequence 49, App1
426	28	51.9	352	11	US-11-188-298-4433	Sequence 4433, App	499	28	51.9	626	11	US-11-072-512-2199	Sequence 2199, App
427	28	51.9	352	11	US-11-264-096-859	Sequence 859, App	500	28	51.9	635	9	US-10-995-561-996	Sequence 996, App
428	28	51.9	353	8	US-10-370-959-150	Sequence 150, App	501	28	51.9	637	11	US-11-087-099-7996	Sequence 7996, App
429	28	51.9	358	10	US-11-233-581-6	Sequence 6, App11	502	28	51.9	641	11	US-11-188-298-3221	Sequence 3221, App
430	28	51.9	360	9	US-10-878-568A-134	Sequence 134, App	503	28	51.9	641	11	US-11-188-298-9714	Sequence 9714, App
431	28	51.9	360	11	US-11-186-284-115	Sequence 115, App	504	28	51.9	668	9	US-10-995-561-992	Sequence 992, App
432	28	51.9	360	11	US-11-188-298-11466	Sequence 11466, A	505	28	51.9	718	9	US-10-878-568A-97	Sequence 97, App1
433	28	51.9	360	11	US-11-188-298-15006	Sequence 15006, A	506	28	51.9	722	9	US-10-784-004-370	Sequence 370, App
434	28	51.9	365	10	US-11-233-581-3	Sequence 3, App11	507	28	51.9	722	9	US-10-784-004-929	Sequence 929, App
435	28	51.9	366	10	US-11-037-243-71	Sequence 71, App1	508	28	51.9	735	11	US-11-188-298-3774	Sequence 3774, App
436	28	51.9	371	8	US-10-370-959-147	Sequence 147, App	509	28	51.9	738	11	US-11-208-288-4	Sequence 4, App1
437	28	51.9	379	11	US-11-109-156-16	Sequence 16, App1	510	28	51.9	762	11	US-11-116-839-13	Sequence 13, App1
438	28	51.9	380	11	US-11-087-099-10747	Sequence 10747, A	511	28	51.9	766	9	US-10-522-789-2	Sequence 2, App1
439	28	51.9	380	11	US-11-188-298-20902	Sequence 20902, A	512	28	51.9	766	11	US-10-501-035-234	Sequence 234, App
440	28	51.9	386	11	US-11-096-568A-20432	Sequence 20432, A	513	28	51.9	766	11	US-11-208-288-2	Sequence 2, App1
441	28	51.9	391	11	US-11-096-568A-18366	Sequence 18366, A	514	28	51.9	815	9	US-10-523-503-64	Sequence 64, App1
442	28	51.9	393	7	US-09-978-360A-711	Sequence 711, App	515	28	51.9	856	11	US-11-096-568A-28102	Sequence 28102, A
443	28	51.9	393	9	US-10-887-540-6	Sequence 6, App11	516	28	51.9	861	11	US-11-096-568A-28101	Sequence 28101, A
444	28	51.9	396	11	US-11-096-568A-18365	Sequence 18365, A	517	28	51.9	890	11	US-11-096-568A-28100	Sequence 28100, A
445	28	51.9	399	11	US-11-079-463-8830	Sequence 8830, App	518	28	51.9	943	9	US-10-821-234-1012	Sequence 1012, App
446	28	51.9	408	11	US-11-096-568A-12788	Sequence 12788, A	519	28	51.9	1006	11	US-11-188-298-21918	Sequence 21918, A
447	28	51.9	409	11	US-11-096-568A-3045	Sequence 3045, App	520	28	51.9	1094	9	US-10-204-639-22	Sequence 22, App1
448	28	51.9	411	11	US-11-096-568A-3047	Sequence 3047, App	521	28	51.9	1168	11	US-11-079-463-9340	Sequence 9340, App
449	28	51.9	413	9	US-10-467-657-2122	Sequence 2122, App	522	28	51.9	1316	10	US-11-314-018-4	Sequence 4, App1
450	28	51.9	413	9	US-10-467-657-2122	Sequence 2122, App	523	28	51.9	1316	11	US-11-091-643-4	Sequence 4, App1
451	28	51.9	419	11	US-11-072-512-3262	Sequence 3262, App	524	28	51.9	1433	11	US-11-114-862-1	Sequence 1, App1
452	28	51.9	423	11	US-11-098-686-11089	Sequence 11089, A	525	28	51.9	1871	9	US-10-877-346-42	Sequence 42, App1
453	28	51.9	423	11	US-11-087-099-527	Sequence 527, App	526	28	51.9	4074	8	US-10-501-834-2	Sequence 2, App1
454	28	51.9	423	11	US-11-087-099-9700	Sequence 9700, App	527	28	51.9	552	11	US-11-188-298-11529	Sequence 11529, A
455	28	51.9	425	11	US-11-096-568A-12787	Sequence 12787, A	528	27.5	50.9	798	11	US-10-467-657-1070	Sequence 1070, App
456	28	51.9	436	11	US-11-150-845-32	Sequence 32, App1	529	27.5	50.9	908	9	US-10-857-435A-586	Sequence 586, App
457	28	51.9	439	11	US-11-096-568A-20431	Sequence 20431, A	530	27	50.0	6	9	US-10-857-435A-586	Sequence 586, App
458	28	51.9	443	11	US-11-096-568A-20430	Sequence 20430, A	531	27	50.0	10	9	US-10-530-061-56	Sequence 56, App1
459	28	51.9	443	11	US-11-096-568A-20430	Sequence 20430, A	532	27	50.0	10	9	US-10-530-061-504	Sequence 504, App

533	27	50.0	10	9	US-10-530-061-538	Sequence 538, App	606	27	50.0	237	11	US-11-188-298-2866	Sequence 2866, App
534	27	50.0	10	9	US-10-530-061-552	Sequence 552, App	607	27	50.0	238	11	US-11-087-099-3032	Sequence 3032, App
535	27	50.0	10	9	US-10-530-061-597	Sequence 597, App	608	27	50.0	240	11	US-11-188-298-18906	Sequence 18906, A
536	27	50.0	12	9	US-10-895-064-1665	Sequence 1665, Ap	609	27	50.0	244	9	US-10-784-004-1173	Sequence 1173, Ap
537	27	50.0	12	11	US-11-129-741-1665	Sequence 1665, Ap	610	27	50.0	244	9	US-10-784-004-1221	Sequence 1221, Ap
538	27	50.0	33	11	US-10-895-064-2365	Sequence 2365, Ap	611	27	50.0	246	11	US-11-188-298-20243	Sequence 20243, A
539	27	50.0	33	11	US-11-129-741-2365	Sequence 2365, Ap	612	27	50.0	249	9	US-10-131-826A-110	Sequence 110, App
540	27	50.0	42	11	US-11-177-509-51	Sequence 51, Appl	613	27	50.0	249	9	US-10-137-873A-110	Sequence 110, App
541	27	50.0	42	11	US-11-177-509-52	Sequence 52, Appl	614	27	50.0	249	9	US-10-137-873A-110	Sequence 110, App
542	27	50.0	42	11	US-11-177-509-53	Sequence 53, Appl	615	27	50.0	249	9	US-11-152-370-110	Sequence 110, App
543	27	50.0	42	11	US-11-177-509-54	Sequence 54, Appl	616	27	50.0	249	11	US-11-290-153-110	Sequence 110, App
544	27	50.0	42	11	US-11-177-509-55	Sequence 55, Appl	617	27	50.0	257	11	US-10-995-561-747	Sequence 747, App
545	27	50.0	42	11	US-11-177-509-56	Sequence 56, Appl	618	27	50.0	257	11	US-11-188-298-3627	Sequence 3627, Ap
546	27	50.0	42	11	US-11-177-509-57	Sequence 57, Appl	619	27	50.0	257	11	US-11-188-298-4345	Sequence 4345, Ap
547	27	50.0	42	11	US-11-177-509-58	Sequence 58, Appl	620	27	50.0	258	11	US-11-228-039-2	Sequence 2, Appli
548	27	50.0	42	11	US-11-177-509-59	Sequence 59, Appl	621	27	50.0	258	11	US-11-188-298-5444	Sequence 5444, Ap
549	27	50.0	42	11	US-11-177-509-60	Sequence 60, Appl	622	27	50.0	260	11	US-11-096-568A-6543	Sequence 6543, Ap
550	27	50.0	42	11	US-11-177-509-61	Sequence 61, Appl	623	27	50.0	262	11	US-11-096-568A-6542	Sequence 6542, Ap
551	27	50.0	42	11	US-11-177-509-62	Sequence 62, Appl	624	27	50.0	266	11	US-11-096-568A-23471	Sequence 23471, A
552	27	50.0	42	11	US-11-177-509-63	Sequence 63, Appl	625	27	50.0	267	11	US-11-096-568A-11036	Sequence 11036, A
553	27	50.0	42	11	US-11-177-509-64	Sequence 64, Appl	626	27	50.0	268	9	US-10-491-468-23	Sequence 23, Appl
554	27	50.0	42	11	US-11-177-509-65	Sequence 65, Appl	627	27	50.0	269	11	US-11-096-568A-33646	Sequence 33646, A
555	27	50.0	42	11	US-11-177-509-66	Sequence 66, Appl	628	27	50.0	271	11	US-11-096-568A-31506	Sequence 31506, A
556	27	50.0	42	11	US-11-177-509-68	Sequence 68, Appl	629	27	50.0	271	11	US-11-188-298-5475	Sequence 5475, Ap
557	27	50.0	42	11	US-11-177-509-69	Sequence 69, Appl	630	27	50.0	274	11	US-11-188-298-1814	Sequence 1814, Ap
558	27	50.0	42	11	US-11-177-509-70	Sequence 70, Appl	631	27	50.0	274	11	US-11-188-298-1814	Sequence 2683, Ap
559	27	50.0	42	11	US-11-177-509-71	Sequence 71, Appl	632	27	50.0	274	11	US-11-188-298-2798	Sequence 2798, Ap
560	27	50.0	42	11	US-11-177-509-72	Sequence 72, Appl	633	27	50.0	275	11	US-11-188-298-6657	Sequence 6657, Ap
561	27	50.0	42	11	US-11-177-509-73	Sequence 73, Appl	634	27	50.0	278	11	US-11-096-568A-31505	Sequence 31505, A
562	27	50.0	42	11	US-11-177-509-74	Sequence 74, Appl	635	27	50.0	280	11	US-11-188-298-3932	Sequence 8435, Ap
563	27	50.0	42	11	US-11-177-509-75	Sequence 75, Appl	636	27	50.0	280	11	US-11-188-298-3932	Sequence 3932, Ap
564	27	50.0	42	11	US-11-177-509-76	Sequence 76, Appl	637	27	50.0	280	11	US-11-188-298-6845	Sequence 6845, Ap
565	27	50.0	42	11	US-11-177-509-77	Sequence 77, Appl	638	27	50.0	281	11	US-11-188-298-18731	Sequence 18731, A
566	27	50.0	42	11	US-11-177-509-78	Sequence 78, Appl	639	27	50.0	281	11	US-11-188-298-1189	Sequence 1189, Ap
567	27	50.0	42	11	US-11-177-509-79	Sequence 79, Appl	640	27	50.0	281	11	US-11-188-298-14260	Sequence 14260, A
568	27	50.0	42	11	US-11-177-509-80	Sequence 80, Appl	641	27	50.0	281	11	US-11-188-298-21360	Sequence 21360, A
569	27	50.0	42	11	US-11-177-509-81	Sequence 81, Appl	642	27	50.0	283	11	US-11-188-298-19842	Sequence 19842, A
570	27	50.0	42	11	US-11-177-509-82	Sequence 82, Appl	643	27	50.0	285	11	US-11-045-004-1161	Sequence 1161, Ap
571	27	50.0	42	11	US-11-177-509-83	Sequence 83, Appl	644	27	50.0	287	11	US-11-226-657-55	Sequence 55, Appl
572	27	50.0	103	11	US-11-079-463-7359	Sequence 7359, Ap	645	27	50.0	288	9	US-10-467-657-1870	Sequence 1870, Ap
573	27	50.0	109	11	US-11-008-570-90	Sequence 90, Appl	646	27	50.0	289	11	US-11-096-568A-13015	Sequence 13015, A
574	27	50.0	110	11	US-11-120-308-48	Sequence 48, Appl	647	27	50.0	291	9	US-10-821-234-1025	Sequence 1025, Ap
575	27	50.0	113	11	US-11-264-096-1539	Sequence 1539, Ap	648	27	50.0	296	11	US-11-045-004-251	Sequence 251, App
576	27	50.0	113	11	US-11-264-096-1540	Sequence 1540, Ap	649	27	50.0	298	11	US-11-096-568A-19767	Sequence 19767, A
577	27	50.0	118	11	US-11-121-438-33	Sequence 33, Appl	650	27	50.0	299	11	US-11-096-568A-19841	Sequence 19841, A
578	27	50.0	122	11	US-11-230-251-30	Sequence 30, Appl	651	27	50.0	300	11	US-11-079-463-8690	Sequence 8690, Ap
579	27	50.0	110	11	US-11-188-298-11184	Sequence 11184, A	652	27	50.0	304	11	US-11-079-463-9374	Sequence 9374, Ap
580	27	50.0	132	11	US-11-096-568A-6936	Sequence 6936, Ap	653	27	50.0	309	9	US-10-506-454-1354	Sequence 1354, Ap
581	27	50.0	134	9	US-10-467-657-6860	Sequence 6860, Ap	654	27	50.0	312	11	US-11-079-463-8956	Sequence 8956, Ap
582	27	50.0	143	9	US-10-793-626-112	Sequence 112, App	655	27	50.0	315	11	US-11-096-568A-23470	Sequence 23470, A
583	27	50.0	143	9	US-10-793-626-1940	Sequence 1940, App	656	27	50.0	320	11	US-11-172-740-1608	Sequence 1608, Ap
584	27	50.0	163	11	US-11-096-568A-21919	Sequence 21919, A	657	27	50.0	323	11	US-11-202-566-1	Sequence 1, Appl1
585	27	50.0	166	11	US-11-176-830-1008	Sequence 1008, Ap	658	27	50.0	324	11	US-11-087-099-7637	Sequence 7637, Ap
586	27	50.0	171	11	US-11-188-298-18315	Sequence 18315, A	659	27	50.0	324	11	US-11-087-099-9909	Sequence 9909, Ap
587	27	50.0	184	11	US-11-096-568A-33648	Sequence 33648, A	660	27	50.0	324	11	US-11-087-099-9909	Sequence 9909, Ap
588	27	50.0	187	11	US-11-188-298-3348	Sequence 3348, Ap	661	27	50.0	324	11	US-11-188-298-7017	Sequence 7017, Ap
589	27	50.0	189	9	US-10-467-657-6854	Sequence 6854, Ap	662	27	50.0	327	11	US-11-087-099-3075	Sequence 3075, Ap
590	27	50.0	189	9	US-10-467-657-7855	Sequence 7855, Ap	663	27	50.0	327	11	US-11-087-099-5345	Sequence 5345, Ap
591	27	50.0	192	11	US-11-096-568A-33647	Sequence 33647, A	664	27	50.0	327	11	US-11-087-099-7248	Sequence 7248, Ap
592	27	50.0	193	11	US-11-096-568A-23472	Sequence 23472, A	665	27	50.0	328	11	US-11-087-099-9254	Sequence 9254, Ap
593	27	50.0	196	11	US-11-188-298-21673	Sequence 21673, A	666	27	50.0	328	11	US-11-096-568A-3831	Sequence 3831, Ap
594	27	50.0	202	11	US-11-096-568A-438	Sequence 438, App	667	27	50.0	331	11	US-11-202-566-25	Sequence 25, Appl
595	27	50.0	205	11	US-11-302-566-5	Sequence 5, Appl1	668	27	50.0	331	11	US-11-096-568A-2830	Sequence 2830, Ap
596	27	50.0	208	11	US-11-079-463-7850	Sequence 7850, Ap	669	27	50.0	334	11	US-11-096-568A-13014	Sequence 13014, A
597	27	50.0	209	11	US-11-202-566-2	Sequence 2, Appl1	670	27	50.0	344	9	US-10-995-561-744	Sequence 744, App
598	27	50.0	211	11	US-11-124-368A-175	Sequence 175, App	671	27	50.0	346	11	US-11-202-566-24	Sequence 24, Appl
599	27	50.0	211	11	US-11-124-368A-176	Sequence 176, App	672	27	50.0	348	11	US-11-096-568A-3829	Sequence 3829, Ap
600	27	50.0	213	9	US-10-467-657-4448	Sequence 4448, Ap	673	27	50.0	348	11	US-11-096-568A-13346	Sequence 13346, A
601	27	50.0	221	11	US-11-188-298-15099	Sequence 15099, A	674	27	50.0	356	11	US-11-188-298-19389	Sequence 19389, A
602	27	50.0	227	9	US-10-878-556A-69	Sequence 69, Appl	675	27	50.0	357	9	US-10-878-556A-83	Sequence 83, Appl
603	27	50.0	228	11	US-11-074-176-136	Sequence 136, App	676	27	50.0	357	9	US-10-878-556A-83	Sequence 83, Appl
604	27	50.0	229	11	US-11-096-568A-19768	Sequence 19768, A	677	27	50.0	357	9	US-10-878-556A-83	Sequence 83, Appl
605	27	50.0	234	11	US-11-096-568A-6544	Sequence 6544, Ap	678	27	50.0	357	11	US-11-202-566-21	Sequence 21, Appl

679	27	50.0	357	11	US-11-202-566-23	Sequence 23, Appl	752	27	50.0	470	9	US-10-467-657-7226	Sequence 7226, Ap
680	27	50.0	357	11	US-11-096-5668A-19840	Sequence 19840, A	753	27	50.0	470	9	US-10-467-657-8118	Sequence 8118, Ap
681	27	50.0	358	9	US-10-467-657-7030	Sequence 7030, Ap	754	27	50.0	470	9	US-11-121-438-15	Sequence 35, Appl
682	27	50.0	359	11	US-11-012-762-58	Sequence 58, Appl	755	27	50.0	473	11	US-11-188-298-1133	Sequence 1133, Ap
683	27	50.0	359	11	US-11-096-5668A-18164	Sequence 18164, A	756	27	50.0	474	9	US-10-986-501-249	Sequence 249, Appl
684	27	50.0	360	11	US-11-087-099-3115	Sequence 3115, A	757	27	50.0	478	11	US-11-096-5668A-18729	Sequence 18729, A
685	27	50.0	362	11	US-11-188-298-5068	Sequence 5068, Ap	758	27	50.0	481	11	US-11-096-5668A-7220	Sequence 7220, Ap
686	27	50.0	364	11	US-11-096-5668A-18262	Sequence 18262, A	759	27	50.0	482	11	US-11-045-004-2627	Sequence 2627, Ap
687	27	50.0	364	11	US-11-096-5668A-19766	Sequence 19766, A	760	27	50.0	483	11	US-11-087-099-1687	Sequence 3687, Ap
688	27	50.0	365	9	US-10-521-053-4	Sequence 4, Appl1	761	27	50.0	483	11	US-11-188-298-3469	Sequence 3469, Ap
689	27	50.0	366	9	US-10-467-657-7024	Sequence 7024, Ap	762	27	50.0	484	11	US-11-096-5668A-10466	Sequence 10466, A
690	27	50.0	366	9	US-10-467-657-7964	Sequence 7964, Ap	763	27	50.0	484	11	US-11-096-5668A-19387	Sequence 19387, A
691	27	50.0	370	9	US-10-204-639-42	Sequence 42, Appl	764	27	50.0	485	11	US-11-072-512-3419	Sequence 3419, Ap
692	27	50.0	378	11	US-11-202-566-22	Sequence 22, Appl	765	27	50.0	490	11	US-11-072-512-2640	Sequence 2640, Ap
693	27	50.0	379	11	US-11-172-740-707	Sequence 707, Ap	766	27	50.0	491	9	US-10-995-561-793	Sequence 743, Appl
694	27	50.0	384	11	US-11-240-769-71	Sequence 71, Appl	767	27	50.0	500	11	US-11-188-298-7044	Sequence 7044, Ap
695	27	50.0	386	11	US-11-188-298-10872	Sequence 10872, A	768	27	50.0	502	11	US-11-188-298-8208	Sequence 8208, Ap
696	27	50.0	387	9	US-10-510-386-212	Sequence 212, Appl	769	27	50.0	505	11	US-11-096-5668A-10465	Sequence 10465, A
697	27	50.0	388	11	US-11-096-5668A-18163	Sequence 18163, A	770	27	50.0	512	11	US-10-995-561-745	Sequence 745, Appl
698	27	50.0	390	8	US-10-370-959-148	Sequence 148, Appl	771	27	50.0	512	11	US-11-096-5668A-10464	Sequence 10464, A
699	27	50.0	391	9	US-10-995-561-739	Sequence 739, Appl	772	27	50.0	530	11	US-11-096-5668A-31901	Sequence 31901, A
700	27	50.0	391	11	US-11-045-004-2697	Sequence 2697, Ap	773	27	50.0	533	11	US-11-087-099-5854	Sequence 5854, Ap
701	27	50.0	392	11	US-11-188-298-5529	Sequence 5529, Ap	774	27	50.0	540	11	US-11-079-463-6055	Sequence 6055, Ap
702	27	50.0	392	11	US-11-188-298-8204	Sequence 8204, Ap	775	27	50.0	543	11	US-11-264-096-1211	Sequence 1211, Ap
703	27	50.0	392	11	US-11-188-298-14860	Sequence 14860, A	776	27	50.0	550	11	US-11-264-096-1284	Sequence 1284, Ap
704	27	50.0	393	11	US-11-172-740-38	Sequence 38, Appl	777	27	50.0	553	11	US-11-264-096-1210	Sequence 1210, Ap
705	27	50.0	393	11	US-11-188-298-7760	Sequence 7760, Ap	778	27	50.0	554	11	US-11-188-298-17308	Sequence 17308, A
706	27	50.0	393	11	US-11-188-298-10324	Sequence 10324, A	779	27	50.0	585	9	US-10-821-234-1489	Sequence 1489, Ap
707	27	50.0	393	11	US-11-188-298-19917	Sequence 19917, A	780	27	50.0	590	9	US-10-632-150-52	Sequence 52, Appl
708	27	50.0	393	11	US-11-188-298-20388	Sequence 20388, A	781	27	50.0	590	10	US-11-106-014-52	Sequence 52, Appl
709	27	50.0	394	11	US-11-188-298-8142	Sequence 8142, Ap	782	27	50.0	590	11	US-11-073-457-52	Sequence 52, Appl
710	27	50.0	394	11	US-11-188-298-17480	Sequence 17480, A	783	27	50.0	590	11	US-11-073-460-52	Sequence 6352, Ap
711	27	50.0	396	11	US-11-188-298-17251	Sequence 17251, A	784	27	50.0	592	9	US-11-079-636-3552	Sequence 22, Appl
712	27	50.0	409	11	US-11-098-666-10691	Sequence 10691, A	785	27	50.0	593	11	US-11-120-308-54	Sequence 34, Appl
713	27	50.0	406	11	US-11-096-5668A-18162	Sequence 18162, A	786	27	50.0	599	11	US-11-090-739-124	Sequence 124, Appl
714	27	50.0	409	11	US-11-096-5668A-7898	Sequence 7898, Ap	787	27	50.0	615	11	US-11-232-405A-32	Sequence 32, Appl
715	27	50.0	418	11	US-11-079-463-8151	Sequence 8151, Ap	788	27	50.0	634	11	US-11-087-099-1607	Sequence 1607, Ap
716	27	50.0	420	11	US-11-096-5668A-13013	Sequence 13013, A	789	27	50.0	635	11	US-11-188-298-6710	Sequence 6710, Ap
717	27	50.0	425	11	US-11-096-5668A-25564	Sequence 25564, A	790	27	50.0	638	9	US-10-995-561-556	Sequence 536, Appl
718	27	50.0	428	11	US-11-138-642-8	Sequence 8, Appl1	791	27	50.0	638	11	US-11-054-281-30	Sequence 30, Appl
719	27	50.0	428	11	US-11-138-882-8	Sequence 8, Appl1	792	27	50.0	638	11	US-11-054-281-111	Sequence 111, Appl
720	27	50.0	428	11	US-11-138-757-9	Sequence 9, Appl1	793	27	50.0	638	11	US-11-054-281-112	Sequence 112, Appl
721	27	50.0	429	11	US-11-096-5668A-7221	Sequence 7221, Ap	794	27	50.0	644	11	US-11-045-004-125	Sequence 125, Appl
722	27	50.0	430	11	US-11-079-463-6204	Sequence 6204, Ap	795	27	50.0	645	11	US-11-188-298-18561	Sequence 18561, A
723	27	50.0	432	9	US-10-995-561-738	Sequence 738, Appl	796	27	50.0	658	9	US-10-915-002-220	Sequence 220, Appl
724	27	50.0	433	9	US-10-506-454-1525	Sequence 1525, Ap	797	27	50.0	666	11	US-11-087-099-8103	Sequence 8103, Appl
725	27	50.0	434	9	US-10-506-454-259	Sequence 259, Appl	798	27	50.0	666	11	US-11-188-298-7496	Sequence 7496, Ap
726	27	50.0	434	11	US-11-087-099-2216	Sequence 2216, Ap	799	27	50.0	684	9	US-10-714-781A-55	Sequence 55, Appl
727	27	50.0	441	11	US-11-096-5668A-25563	Sequence 25563, A	800	27	50.0	684	9	US-10-714-781A-57	Sequence 57, Appl
728	27	50.0	443	11	US-11-096-5668A-7897	Sequence 7897, Ap	801	27	50.0	684	9	US-10-714-781A-61	Sequence 61, Appl
729	27	50.0	444	9	US-10-821-234-1476	Sequence 1476, Ap	802	27	50.0	686	9	US-10-714-781A-59	Sequence 59, Appl
730	27	50.0	444	11	US-11-096-5668A-31902	Sequence 31902, A	803	27	50.0	686	9	US-10-821-234-1197	Sequence 1197, Appl
731	27	50.0	445	9	US-10-995-561-746	Sequence 746, Appl	804	27	50.0	697	9	US-11-210-960-6	Sequence 6, Appl1
732	27	50.0	445	11	US-11-172-740-464	Sequence 464, Appl	805	27	50.0	730	11	US-11-188-298-15121	Sequence 15121, A
733	27	50.0	445	11	US-11-172-740-469	Sequence 469, Appl	806	27	50.0	738	9	US-10-467-657-8036	Sequence 8036, Ap
734	27	50.0	445	11	US-11-172-740-709	Sequence 709, Appl	807	27	50.0	748	9	US-10-467-657-8036	Sequence 8036, Ap
735	27	50.0	445	11	US-11-079-463-9167	Sequence 9167, Appl	808	27	50.0	757	11	US-11-188-298-12202	Sequence 2202, A
736	27	50.0	446	11	US-11-079-463-5366	Sequence 5366, Ap	809	27	50.0	763	11	US-11-188-298-15673	Sequence 15673, A
737	27	50.0	447	11	US-11-172-740-463	Sequence 463, Appl	810	27	50.0	791	9	US-10-467-657-5014	Sequence 5014, Ap
738	27	50.0	447	11	US-11-172-740-466	Sequence 466, Appl	811	27	50.0	797	8	US-10-370-959-121	Sequence 121, Appl
739	27	50.0	447	11	US-11-172-740-712	Sequence 712, Appl	812	27	50.0	797	9	US-10-995-561-802	Sequence 802, Appl
740	27	50.0	450	9	US-10-995-561-677	Sequence 677, Appl	813	27	50.0	798	11	US-11-188-298-17382	Sequence 17382, A
741	27	50.0	454	11	US-11-087-099-11601	Sequence 11601, A	814	27	50.0	814	11	US-11-087-099-1901	Sequence 3901, A
742	27	50.0	454	11	US-11-096-5668A-19388	Sequence 19388, A	815	27	50.0	814	11	US-11-188-298-3661	Sequence 3661, Ap
743	27	50.0	456	11	US-11-096-5668A-7896	Sequence 7896, Ap	816	27	50.0	840	11	US-11-207-078-190	Sequence 190, Appl
744	27	50.0	457	9	US-10-995-561-741	Sequence 741, Appl	817	27	50.0	845	11	US-11-188-298-12622	Sequence 12622, A
745	27	50.0	459	11	US-11-014-842A-23	Sequence 23, Appl	818	27	50.0	848	11	US-11-079-463-9955	Sequence 9955, A
746	27	50.0	459	11	US-11-210-960-5	Sequence 5, Appl1	819	27	50.0	863	11	US-11-169-041-167	Sequence 167, Appl
747	27	50.0	461	11	US-11-087-099-2520	Sequence 2520, Ap	820	27	50.0	868	9	US-10-995-561-792	Sequence 792, Appl
748	27	50.0	463	11	US-11-202-566-11	Sequence 11, Appl	821	27	50.0	872	11	US-11-207-078-221	Sequence 221, Appl
749	27	50.0	466	11	US-11-096-5668A-18731	Sequence 18731, A	822	27	50.0	875	11	US-11-045-004-126	Sequence 126, Appl
750	27	50.0	468	11	US-11-096-5668A-18730	Sequence 18730, A	823	27	50.0	882	11	US-11-098-666-10893	Sequence 10893, A
751	27	50.0	469	11	US-11-096-5668A-25562	Sequence 25562, A	824	27	50.0	884	11	US-11-087-099-11219	Sequence 11219, A

825	27	50.0	890	11	US-11-072-512-2461	Sequence 2461, Ap	898	26	48.1	160	11	US-11-264-096-1197	Sequence 1197, Ap
826	27	50.0	890	11	US-11-072-512-2992	Sequence 2992, Ap	899	26	48.1	164	11	US-11-087-099-9994	Sequence 9994, Ap
827	27	50.0	920	11	US-11-087-099-11404	Sequence 11404, A	900	26	48.1	167	11	US-11-188-298-4082	Sequence 4082, Ap
828	27	50.0	920	11	US-11-188-298-21540	Sequence 21540, A	901	26	48.1	176	11	US-11-188-298-8191	Sequence 8191, Ap
829	27	50.0	966	9	US-10-204-639-35	Sequence 35, Appl	902	26	48.1	188	11	US-11-098-886-10230	Sequence 10230, A
830	27	50.0	972	11	US-11-203-566-9	Sequence 9, Appl	903	26	48.1	188	11	US-11-096-568A-6757	Sequence 6757, Ap
831	27	50.0	1044	8	US-10-511-937-2348	Sequence 2348, Ap	904	26	48.1	193	9	US-10-821-234-1439	Sequence 1439, Ap
832	27	50.0	1044	9	US-10-501-035-325	Sequence 325, Appl	905	26	48.1	193	9	US-10-509-472-6	Sequence 6, Appl
833	27	50.0	1044	11	US-11-219-611-1	Sequence 2, Appl	906	26	48.1	194	9	US-10-821-234-856	Sequence 856, Appl
834	27	50.0	1044	11	US-11-219-611-1	Sequence 1, Appl	907	26	48.1	195	9	US-10-902-137-9	Sequence 9, Appl
835	27	50.0	1053	9	US-10-330-773-34	Sequence 34, Appl	908	26	48.1	204	9	US-11-079-663-7025	Sequence 7023, Ap
836	27	50.0	1063	9	US-10-330-773-31	Sequence 31, Appl	909	26	48.1	205	11	US-11-092-137-2	Sequence 2, Appl
837	27	50.0	1087	9	US-10-330-773-36	Sequence 36, Appl	910	26	48.1	205	11	US-11-188-298-8824	Sequence 8824, Ap
838	27	50.0	1087	11	US-11-102-978-2	Sequence 2, Appl	911	26	48.1	209	11	US-11-096-568A-6756	Sequence 6756, Ap
839	27	50.0	1113	11	US-11-067-811-4	Sequence 4, Appl	912	26	48.1	209	11	US-11-045-004-149	Sequence 149, Appl
840	27	50.0	1128	11	US-11-202-566-7	Sequence 7, Appl	913	26	48.1	210	11	US-11-079-663-5569	Sequence 2776, Ap
841	27	50.0	1403	11	US-11-087-099-4219	Sequence 4219, Ap	914	26	48.1	214	11	US-11-079-663-5569	Sequence 5569, Ap
842	27	50.0	1515	9	US-10-915-002-292	Sequence 292, Appl	915	26	48.1	215	7	US-09-978-360A-419	Sequence 419, Appl
843	27	50.0	1663	9	US-10-982-545-6	Sequence 6, Appl	916	26	48.1	215	8	US-10-542-038-2	Sequence 2, Appl
844	27	50.0	1663	11	US-11-177-506-34	Sequence 34, Appl	917	26	48.1	215	11	US-11-116-144-297	Sequence 297, Appl
845	27	50.0	2048	11	US-11-116-939-6	Sequence 6, Appl	918	26	48.1	215	11	US-11-220-372-297	Sequence 297, Appl
846	27	50.0	2764	9	US-10-995-561-691	Sequence 691, Appl	919	26	48.1	215	11	US-11-220-372-297	Sequence 308, Appl
847	27	50.0	2813	9	US-10-995-561-688	Sequence 688, Appl	920	26	48.1	215	11	US-11-269-323-2	Sequence 2, Appl
848	27	50.0	2919	9	US-10-821-234-1133	Sequence 1133, Ap	921	26	48.1	215	11	US-11-269-323-5	Sequence 5, Appl
849	27	50.0	3402	9	US-10-204-252-18	Sequence 18, Appl	922	26	48.1	215	11	US-11-269-323-7	Sequence 7, Appl
850	27	50.0	3433	9	US-10-714-781A-67	Sequence 67, Appl	923	26	48.1	216	11	US-11-096-568A-2775	Sequence 2775, Ap
851	27	50.0	3433	11	US-11-223-729-2	Sequence 2, Appl	924	26	48.1	216	11	US-11-096-568A-2777	Sequence 2777, Ap
852	27	50.0	3433	11	US-11-223-729-2	Sequence 9, Appl	925	26	48.1	221	8	US-10-542-038-13	Sequence 13, Appl
853	26.5	49.1	570	11	US-11-045-004-1041	Sequence 1041, Ap	926	26	48.1	221	11	US-11-085-466-1	Sequence 14, Appl
854	26.5	49.1	602	11	US-11-096-568A-30507	Sequence 30507, A	927	26	48.1	221	11	US-11-175-121-14	Sequence 14, Appl
855	26.5	49.1	701	11	US-11-096-568A-30506	Sequence 30506, A	928	26	48.1	224	11	US-11-130-821-8	Sequence 8, Appl
856	26.5	49.1	879	11	US-11-096-568A-30505	Sequence 30505, A	929	26	48.1	224	11	US-11-188-298-6995	Sequence 6995, Ap
857	26	48.1	10	11	US-11-254-419-113	Sequence 113, Appl	930	26	48.1	228	11	US-11-096-568A-2774	Sequence 2774, Ap
858	26	48.1	12	9	US-10-895-064-2461	Sequence 2461, Ap	931	26	48.1	230	11	US-11-188-298-893	Sequence 893, Appl
859	26	48.1	12	11	US-11-129-741-2461	Sequence 2461, Ap	932	26	48.1	233	11	US-11-096-568A-16261	Sequence 16261, A
860	26	48.1	16	9	US-10-945-442-10	Sequence 10, Appl	933	26	48.1	234	11	US-11-096-568A-7272	Sequence 7272, Ap
861	26	48.1	16	9	US-10-994-521-10	Sequence 10, Appl	934	26	48.1	234	11	US-11-096-568A-24697	Sequence 24697, A
862	26	48.1	24	9	US-10-895-064-2300	Sequence 2300, Ap	935	26	48.1	235	11	US-11-079-463-631	Sequence 6431, Ap
863	26	48.1	24	11	US-11-129-741-2300	Sequence 2300, Ap	936	26	48.1	235	8	US-10-370-950-33	Sequence 33, Appl
864	26	48.1	27	11	US-11-043-806-560	Sequence 560, Appl	937	26	48.1	239	11	US-11-188-298-1452	Sequence 1452, Ap
865	26	48.1	29	11	US-11-108-185-32	Sequence 32, Appl	938	26	48.1	241	11	US-11-045-004-1076	Sequence 1076, Ap
866	26	48.1	33	9	US-10-895-064-1547	Sequence 1547, Ap	939	26	48.1	241	11	US-11-096-568A-24696	Sequence 24696, A
867	26	48.1	33	11	US-11-129-741-1547	Sequence 1547, Ap	940	26	48.1	242	11	US-11-096-568A-16260	Sequence 16260, A
868	26	48.1	55	11	US-11-000-463-900	Sequence 900, Appl	941	26	48.1	245	11	US-11-188-298-11863	Sequence 11863, A
869	26	48.1	60	11	US-11-004-399-3460	Sequence 3460, Ap	942	26	48.1	249	11	US-11-087-099-261	Sequence 261, Appl
870	26	48.1	83	9	US-10-948-571-62	Sequence 62, Appl	943	26	48.1	250	11	US-11-096-568A-7271	Sequence 7271, Ap
871	26	48.1	97	9	US-10-517-696-155	Sequence 155, Appl	944	26	48.1	251	11	US-11-085-466-13	Sequence 13, Appl
872	26	48.1	106	11	US-11-079-463-8645	Sequence 8645, Ap	945	26	48.1	254	11	US-11-087-099-4689	Sequence 4689, Ap
873	26	48.1	110	11	US-11-264-096-1668	Sequence 1668, Ap	946	26	48.1	254	11	US-11-087-099-4689	Sequence 17129, A
874	26	48.1	111	11	US-11-188-298-1632	Sequence 1852, A	947	26	48.1	255	11	US-11-188-298-17129	Sequence 17129, A
875	26	48.1	119	9	US-10-467-657-1852	Sequence 76, Appl	948	26	48.1	255	11	US-11-087-099-7661	Sequence 7661, Ap
876	26	48.1	125	9	US-10-927-641-76	Sequence 16, Appl	949	26	48.1	255	11	US-11-188-298-4355	Sequence 4355, Ap
877	26	48.1	128	8	US-10-542-038-16	Sequence 8, Appl	950	26	48.1	256	11	US-11-072-512-3255	Sequence 3255, Ap
878	26	48.1	128	11	US-11-269-323-8	Sequence 8, Appl	951	26	48.1	262	11	US-11-096-568A-16220	Sequence 16220, Ap
879	26	48.1	128	11	US-11-269-323-10	Sequence 10, Appl	952	26	48.1	263	11	US-11-043-806-356	Sequence 356, Appl
880	26	48.1	131	11	US-11-045-004-2800	Sequence 2800, Ap	953	26	48.1	266	11	US-11-096-568A-7270	Sequence 7270, Ap
881	26	48.1	138	11	US-11-079-463-7197	Sequence 7197, Ap	954	26	48.1	266	11	US-11-188-298-19908	Sequence 19908, A
882	26	48.1	139	11	US-11-188-298-6255	Sequence 6255, Ap	955	26	48.1	281	11	US-11-188-298-7735	Sequence 7735, Ap
883	26	48.1	142	11	US-11-264-096-1667	Sequence 1667, Ap	956	26	48.1	282	11	US-11-096-568A-20586	Sequence 20586, A
884	26	48.1	144	9	US-10-485-517-312	Sequence 312, Appl	957	26	48.1	285	11	US-11-188-298-20966	Sequence 20966, A
885	26	48.1	146	9	US-10-131-826A-408	Sequence 408, Appl	958	26	48.1	288	11	US-11-087-099-11672	Sequence 11672, A
886	26	48.1	146	9	US-10-467-657-3166	Sequence 3166, Ap	959	26	48.1	292	9	US-10-506-454-73	Sequence 6303, Ap
887	26	48.1	146	9	US-10-973-115B-408	Sequence 408, Appl	960	26	48.1	292	9	US-11-188-298-8628	Sequence 8628, Ap
888	26	48.1	146	9	US-10-216-161A-221	Sequence 221, Appl	961	26	48.1	293	9	US-10-131-826A-422	Sequence 422, Appl
889	26	48.1	146	9	US-10-137-873A-408	Sequence 408, Appl	962	26	48.1	293	9	US-10-973-115B-422	Sequence 422, Appl
890	26	48.1	146	9	US-10-152-370-408	Sequence 408, Appl	963	26	48.1	293	9	US-10-216-161A-231	Sequence 231, Appl
891	26	48.1	146	11	US-11-290-153-408	Sequence 408, Appl	964	26	48.1	293	9	US-10-137-873A-422	Sequence 422, Appl
892	26	48.1	151	11	US-11-188-298-5956	Sequence 5956, Ap	965	26	48.1	293	9	US-10-152-370-422	Sequence 422, Appl
893	26	48.1	156	11	US-10-506-454-694	Sequence 694, Appl	966	26	48.1	293	9	US-10-784-004-689	Sequence 689, Appl
894	26	48.1	156	11	US-11-079-463-6295	Sequence 6295, Ap	967	26	48.1	293	9	US-11-098-666-10616	Sequence 10616, A
895	26	48.1	157	11	US-11-188-298-5430	Sequence 5430, Ap	968	26	48.1	293	11	US-11-290-153-422	Sequence 422, Appl
896	26	48.1	158	9	US-10-530-253-19	Sequence 19, Appl	969	26	48.1	295	11	US-11-087-099-6370	Sequence 6370, Ap
897	26	48.1	158	9	US-10-530-253-26	Sequence 26, Appl	970	26	48.1	295	11	US-11-087-099-6370	Sequence 6370, Ap

```
971 26 48.1 295 11 US-11-087-099-6792 Sequence 6792, Ap
972 26 48.1 295 11 US-11-087-099-12343 Sequence 12343, A
973 26 48.1 295 11 US-11-188-298-13177 Sequence 13177, A
974 26 48.1 297 11 US-11-055-822-922 Sequence 922, App
975 26 48.1 297 11 US-11-045-004-583 Sequence 583, App
976 26 48.1 300 11 US-11-096-568A-18358 Sequence 18358, A
977 26 48.1 302 10 US-11-301-554-806 Sequence 806, App
978 26 48.1 304 11 US-11-096-568A-20585 Sequence 20585, A
979 26 48.1 305 11 US-11-188-298-3153 Sequence 3153, App
980 26 48.1 306 11 US-11-045-004-502 Sequence 502, App
981 26 48.1 306 11 US-11-264-096-1198 Sequence 1198, App
982 26 48.1 310 9 US-10-520-820-112 Sequence 12, App1
983 26 48.1 311 11 US-11-096-568A-18357 Sequence 18357, A
984 26 48.1 315 11 US-11-087-099-11558 Sequence 11558, A
985 26 48.1 315 11 US-11-188-298-1437 Sequence 1437, App
986 26 48.1 319 11 US-11-188-298-4645 Sequence 4645, App
987 26 48.1 321 11 US-11-172-740-39 Sequence 39, App1
988 26 48.1 323 11 US-11-098-686-10185 Sequence 10185, A
989 26 48.1 324 11 US-11-087-099-4966 Sequence 4966, App
990 26 48.1 324 11 US-11-172-740-44 Sequence 44, App1
991 26 48.1 325 9 US-10-498-691A-10 Sequence 10, App1
992 26 48.1 325 9 US-10-533-811-11 Sequence 11, App1
993 26 48.1 326 11 US-11-079-463-8662 Sequence 8662, App
994 26 48.1 327 11 US-11-098-686-10271 Sequence 10271, A
995 26 48.1 328 11 US-11-096-568A-3897 Sequence 3897, App
996 26 48.1 331 11 US-11-072-512-2976 Sequence 2976, App
997 26 48.1 331 11 US-11-188-298-15741 Sequence 15741, A
998 26 48.1 331 11 US-11-188-298-15829 Sequence 15829, A
999 26 48.1 333 11 US-11-096-568A-18356 Sequence 18356, A
1000 26 48.1 333 11 US-11-188-298-21977 Sequence 21977, A
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-506
; Sequence 506, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SOUTHWOOD, JOHN
; APPLICANT: SIDNEY, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EXS/W-M
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 506
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-506

Query Match 100.0%; Score 54; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 2
US-10-530-253-13
; Sequence 13, Application US/10530253
```

```
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 13
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-13

Query Match 100.0%; Score 54; DB 9; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.018;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 3
US-11-206-138-3
; Sequence 3, Application US/11206138
; Publication No. US20060039919A1
; GENERAL INFORMATION:
; APPLICANT: HealthBanks Biotech CO. LTD.
; TITLE OF INVENTION: Fusion protein for inhibiting cervical cancer
; FILE REFERENCE: P7819/0613
; CURRENT APPLICATION NUMBER: US/11/206,138
; CURRENT FILING DATE: 2005-08-18
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 3
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-11-206-138-3

Query Match 100.0%; Score 54; DB 11; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.019;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 4
US-10-530-253-1
; Sequence 1, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
```

```

; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-1
```

```
Query Match          100.0%; Score 54; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
DB      72 KISEYRHYC 80
```

```
RESULT 5
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-3
```

```
Query Match          100.0%; Score 54; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
DB      72 KISEYRHYC 80
```

```
RESULT 6
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
```

```

; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5
```

```
Query Match          100.0%; Score 54; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
DB      72 KISEYRHYC 80
```

```
RESULT 7
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7
```

```
Query Match          100.0%; Score 54; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHYC 9
        |||||
DB      169 KISEYRHYC 177
```

```
RESULT 8
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9
```


Query Match	100.0%	Score 54;	DB 9;	Length 248;
Best Local Similarity	100.0%;	Pred. No. 0.028;		
Matches	9;	Conservative 0;	Mismatches 0;	Indels 0;
			Gaps 0;	

```

QY      1 KISEYRHYC  9
         |||||
Db      169 KISEYRHYC 177

```

```

RESULT 9
US-10-530-253-11
: Sequence 11, Application US/10530253
: Publication No. US20060014926v1
: GENERAL INFORMATION:
: APPLICANT: Casasetti, Maria C.
: APPLICANT: Smith, Larry
: APPLICANT: Jeffrey K. Pullen
: APPLICANT: Susan P. McBriney
: TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
: FILE REFERENCE: 00630/100M137-US2
: CURRENT FILING DATE: 2005-04-04
: PRIOR APPLICATION NUMBER: PCT/US2003/031726
: PRIOR FILING DATE: 2003-10-02
: PRIOR APPLICATION NUMBER: US 60/415,929
: PRIOR FILING DATE: 2002-10-03
: NUMBER OF SEQ ID NOS: 65
: SOFTWARE: SeqId version 3.1
: SEQ ID NO 11
: LENGTH: 248
: TYPE: PRT
: ORGANISM: Human papillomavirus type 16
: US-10-530-253-11

```

```
Query Match      100.0%; Score 54; DB 9; Length 246;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0
```

QY	1	KISEYRHYC	9
Db	169	KISEYRHYC	177

```

RESULT 10
US-11-192-923A-2
Sequence 2, Application US/11192923A
Publication No. US20060018928A1
GENERAL INFORMATION:
APPLICANT: PANG, XIAOMU
TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
TITLE OF INVENTION: RECOMBINANT REPLICON
FILE REFERENCE: 116620-003
CURRENT APPLICATION NUMBER: US/11/192,923A
CURRENT FILING DATE: 2005-07-29
PRIOR APPLICATION NUMBER: CN 03115272.4
PRIOR FILING DATE: 2003-01-30
PRIOR APPLICATION NUMBER: CN 03115273.2
PRIOR FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 45
SOFTWARE: PatentIn Ver. 3.3
SEQ ID NO 2
LENGTH: 256
TYPE: RPT
ORGANISM: Human papillomavirus
US-11-192-923A-2

```

```
Query Match      100.0%; Score 54; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.029;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0
```

QY 1 KISEYRHYC 9
|||
Db 177 KISEYRHYC 185

```

RESULT 11
US-10-530-061-505
; Sequence 505, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:

```

Query Match	92.6%	Score 50;	DB 9;	Length 10;
Best Local Similarity	88.9%	Pred. No. 0.0086;		
Matches	8;	Conservative	0;	Mismatches 1;
			Indels	0;
			Gaps	0;

QY	1 KISEYRHYC 9
Db	1 KFESEYRHYC 9

```

RESULT 12
US-10-530-061-40
Sequence 40, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.033US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 40
LENGTH: 10
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-40

```

Query Match	83.3%	Score 45;	DB 9;	Length 10;
Best Local Similarity	100.0%	Pred. No. 0.065;		
Matches	8;	Conservative	0;	Mismatches 0;
			Indels	0;
			Gaps	0

QY	1	KISEYRHY	8
Db	3	KISEYRHY	10

RESULT 13


```
US-10-530-061-475
; Sequence 475, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 475
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-475

Query Match      83.3%; Score 45; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.065;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
   |||||
Db 1 KISEYRHY 8

RESULT 14
US-10-530-061-554
; Sequence 554, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 554
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-554

Query Match      83.3%; Score 45; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.065;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
   |||||
Db 1 KISEYRHY 8

RESULT 15
US-10-530-061-599
; Sequence 599, Application US/10530061
; Publication No. US20060079453A1
```

```
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 599
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-599

Query Match      83.3%; Score 45; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.065;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
   |||||
Db 1 KISEYRHY 8

RESULT 16
US-10-530-061-775
; Sequence 775, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 775
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-775

Query Match      83.3%; Score 45; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.065;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
   |||||
Db 3 KISEYRHY 10

RESULT 17
US-10-530-253-22
; Sequence 22, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
```

```
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 22
; LENGTH: 148
; TYPE: PRT
; ORGANISM: Human papillomavirus type 52
US-10-530-253-22
```

```
Query Match      83.3%; Score 45; DB 9; Length 148;
Best Local Similarity 100.0%; Pred. No. 0.67;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHY 8
      |||||
Db      72 KISEYRHY 79
```

```
RESULT 18
US-10-530-253-17
; Sequence 17, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 17
; LENGTH: 149
; TYPE: PRT
; ORGANISM: Human papillomavirus type 33
US-10-530-253-17
```

```
Query Match      83.3%; Score 45; DB 9; Length 149;
Best Local Similarity 100.0%; Pred. No. 0.67;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHY 8
      |||||
Db      72 KISEYRHY 79
```

```
RESULT 19
US-10-530-253-24
; Sequence 24, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
```

```
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 24
; LENGTH: 149
; TYPE: PRT
; ORGANISM: Human papillomavirus type 58
US-10-530-253-24
```

```
Query Match      83.3%; Score 45; DB 9; Length 149;
Best Local Similarity 100.0%; Pred. No. 0.67;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHY 8
      |||||
Db      72 KISEYRHY 79
```

```
RESULT 20
US-10-530-061-598
; Sequence 598, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO: 598
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-598
```

```
Query Match      81.5%; Score 44; DB 9; Length 10;
Best Local Similarity 87.5%; Pred. No. 0.097;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 KISEYRHY 8
      |||||
Db      1 KVSEYRHY 8
```

```
RESULT 21
US-10-530-061-124
; Sequence 124, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
```

;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 124
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papillomavirus
US-10-530-061-124

Query Match 75.9%; Score 41; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.32;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHVC 9
| | | | |
Db 1 EYRHVC 6

RESULT 22
US-10-530-061-553
;; Sequence 553, Application US/10530061
;; Publication No. US20060079453A1
;; GENERAL INFORMATION:
;; APPLICANT: SIDNEY, JOHN
;; APPLICANT: SOUTHWOOD, SCOTT
;; APPLICANT: SETTE, ALESSANDRO
;; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
;; FILE REFERENCE: 2060.033US02/EKS/M-M
;; CURRENT APPLICATION NUMBER: US/10/530,061
;; PRIOR FILING DATE: 2005-04-04
;; PRIOR APPLICATION NUMBER: PCT/US03/31308
;; PRIOR FILING DATE: 2003-10-03
;; PRIOR APPLICATION NUMBER: 60/416,207
;; PRIOR FILING DATE: 2002-10-03
;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 553
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papillomavirus
US-10-530-061-553

Query Match 75.9%; Score 41; DB 9; Length 10;
Best Local Similarity 87.5%; Pred. No. 0.32;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
| | | | |
Db 1 KISEYRHY 8

RESULT 23
US-10-530-061-850
;; Sequence 850, Application US/10530061
;; Publication No. US20060079453A1
;; GENERAL INFORMATION:
;; APPLICANT: SIDNEY, JOHN
;; APPLICANT: SOUTHWOOD, SCOTT
;; APPLICANT: SETTE, ALESSANDRO
;; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
;; FILE REFERENCE: 2060.033US02/EKS/M-M
;; CURRENT APPLICATION NUMBER: US/10/530,061
;; PRIOR FILING DATE: 2005-04-04
;; PRIOR APPLICATION NUMBER: PCT/US03/31308
;; PRIOR FILING DATE: 2003-10-03
;; PRIOR APPLICATION NUMBER: 60/416,207
;; PRIOR FILING DATE: 2002-10-03
;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503

;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 850
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papillomavirus
US-10-530-061-850

Query Match 75.9%; Score 41; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.32;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHVC 9
| | | | |
Db 1 EYRHVC 6

RESULT 24
US-10-530-061-41
;; Sequence 41, Application US/10530061
;; Publication No. US20060079453A1
;; GENERAL INFORMATION:
;; APPLICANT: SIDNEY, JOHN
;; APPLICANT: SOUTHWOOD, SCOTT
;; APPLICANT: SETTE, ALESSANDRO
;; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
;; FILE REFERENCE: 2060.033US02/EKS/M-M
;; CURRENT APPLICATION NUMBER: US/10/530,061
;; PRIOR FILING DATE: 2005-04-04
;; PRIOR APPLICATION NUMBER: PCT/US03/31308
;; PRIOR FILING DATE: 2003-10-03
;; PRIOR APPLICATION NUMBER: 60/416,207
;; PRIOR FILING DATE: 2002-10-03
;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 41
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: Human papillomavirus
US-10-530-061-41

Query Match 74.1%; Score 40; DB 9; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.9e+05;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHY 8
| | | | |
Db 1 ISEYRHY 7

RESULT 25
US-10-530-061-122
;; Sequence 122, Application US/10530061
;; Publication No. US20060079453A1
;; GENERAL INFORMATION:
;; APPLICANT: SIDNEY, JOHN
;; APPLICANT: SOUTHWOOD, SCOTT
;; APPLICANT: SETTE, ALESSANDRO
;; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
;; FILE REFERENCE: 2060.033US02/EKS/M-M
;; CURRENT APPLICATION NUMBER: US/10/530,061
;; PRIOR FILING DATE: 2005-04-04
;; PRIOR APPLICATION NUMBER: PCT/US03/31308
;; PRIOR FILING DATE: 2003-10-03
;; PRIOR APPLICATION NUMBER: 60/416,207
;; PRIOR FILING DATE: 2002-10-03
;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 122
;; LENGTH: 9

```

; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-122
Query Match          74.1%; Score 40; DB 9; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.9e+05;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHY 8
   |||||
Db 1 ISEYRHY 7

RESULT 26
US-10-530-061-776
; Sequence 776, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 776
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-776
Query Match          74.1%; Score 40; DB 9; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.9e+05;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHY 8
   |||||
Db 1 ISEYRHY 7

RESULT 27
US-10-530-061-54
; Sequence 54, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 54
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-54
```

```

Query Match          74.1%; Score 40; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.49;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ISEYRHY 8
   |||||
Db 4 ISEYRHY 10

RESULT 28
US-11-144-947-640
; Sequence 640, Application US/11144947
; Publication No. US20060084082A1
; GENERAL INFORMATION:
; APPLICANT: Ruben et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P2C2
; CURRENT APPLICATION NUMBER: US/11/144,947
; CURRENT FILING DATE: 2005-06-06
; PRIOR APPLICATION NUMBER: 09/882,171
; PRIOR FILING DATE: 2005-06-03
; PRIOR APPLICATION NUMBER: 09/809,391
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/190,068
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 10/164,861
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: 09/149,476
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: PCT/US98/04493
; PRIOR FILING DATE: 1998-03-06
; PRIOR APPLICATION NUMBER: 60/040,162
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,333
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/038,621
; PRIOR FILING DATE: 1997-03-07
; PRIOR APPLICATION NUMBER: 60/040,626
; PRIOR FILING DATE: 1997-03-07
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 761
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 640
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-144-947-640
Query Match          70.4%; Score 38; DB 11; Length 28;
Best Local Similarity 75.0%; Pred. No. 2.7;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 ISEYRHYC 9
   ||: |||
Db 4 ISQLRHYC 11

RESULT 29
US-10-131-826A-550
; Sequence 550, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
```

```
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 550
LENGTH: 198
TYPE: PRT
ORGANISM: Homo Sapien
US-10-131-826A-550
```

```
Query Match      70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      2 ISEYRHYC 9
      ||: |||
Db      64 ISQLRHYC 71

RESULT 30
US-10-973-115B-550
Sequence 550, Application US/10973115B
Publication No. US20060040351A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Geriltsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODIN
TITLE OF INVENTION: SAME
```

```
FILE REFERENCE: 39870-3330R1C300C1
CURRENT APPLICATION NUMBER: US/10/973,115B
CURRENT FILING DATE: 2004-10-22
PRIOR APPLICATION NUMBER: US 10/145,747
PRIOR FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: US 10/028,072
PRIOR FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: PCT/US00/32678
PRIOR FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: US 09/581,742
PRIOR FILING DATE: 2000-06-16
PRIOR APPLICATION NUMBER: PCT/US00/05746
PRIOR FILING DATE: 2000-03-02
PRIOR APPLICATION NUMBER: US 60/135,736
PRIOR FILING DATE: 1999-05-25
PRIOR APPLICATION NUMBER: US 60/123,090
PRIOR FILING DATE: 1999-03-05
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 550
LENGTH: 198
TYPE: PRT
ORGANISM: Homo sapiens
US-10-973-115B-550

Query Match      70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      2 ISEYRHYC 9
      ||: |||
Db      64 ISQLRHYC 71
```

```
RESULT 31
US-10-218-784-226
Sequence 226, Application US/10218784
Publication No. US20060074223A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Desnoyers, Luc
APPLICANT: Geriltsen, Mary
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe F.
APPLICANT: Watanabe, Colin L.
APPLICANT: Wood, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3530P1C18
CURRENT APPLICATION NUMBER: US/10/218,784
CURRENT FILING DATE: 2002-08-12
PRIOR APPLICATION NUMBER: 10/119,480
PRIOR FILING DATE: 2002-04-09
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/062287
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/063549
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/064103
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/069873
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/079728
```

PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081955
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082804
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/086392
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/089532
PRIOR FILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089538
PRIOR FILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089905
PRIOR FILING DATE: 1998-06-18
PRIOR APPLICATION NUMBER: 60/090472
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090557
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090691
PRIOR FILING DATE: 1998-06-25
PRIOR APPLICATION NUMBER: 60/090695
PRIOR FILING DATE: 1998-06-25
PRIOR APPLICATION NUMBER: 60/091982
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/095302
PRIOR FILING DATE: 1998-08-04
PRIOR APPLICATION NUMBER: 60/095318
PRIOR FILING DATE: 1998-08-04
PRIOR APPLICATION NUMBER: 60/095916
PRIOR FILING DATE: 1998-08-10
PRIOR APPLICATION NUMBER: 60/096146
PRIOR FILING DATE: 1998-08-11
PRIOR APPLICATION NUMBER: 60/096791
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: 60/097986
PRIOR FILING DATE: 1998-08-26
PRIOR APPLICATION NUMBER: 60/098544
PRIOR FILING DATE: 1998-08-31
PRIOR APPLICATION NUMBER: 60/099596
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099598
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099803
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099811
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099812
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099816
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/100038
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: 60/100385
PRIOR FILING DATE: 1998-09-15
PRIOR APPLICATION NUMBER: 60/100390
PRIOR FILING DATE: 1998-09-15
PRIOR APPLICATION NUMBER: 60/100627
PRIOR FILING DATE: 1998-09-16
PRIOR APPLICATION NUMBER: 60/100848
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/100919
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/101477
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101738
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101741
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101786
PRIOR FILING DATE: 1998-09-25
PRIOR APPLICATION NUMBER: 60/101916
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101922
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/106178
PRIOR FILING DATE: 1998-10-28
PRIOR APPLICATION NUMBER: 60/106248
PRIOR FILING DATE: 1998-10-29
PRIOR APPLICATION NUMBER: 60/106464
PRIOR FILING DATE: 1998-10-30
PRIOR APPLICATION NUMBER: 60/106905
PRIOR FILING DATE: 1998-11-03
PRIOR APPLICATION NUMBER: 60/108787
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: 60/108801
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: 60/108849
PRIOR FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: 60/112422
PRIOR FILING DATE: 1998-12-15
PRIOR APPLICATION NUMBER: 60/113296
PRIOR FILING DATE: 1998-12-22
PRIOR APPLICATION NUMBER: 60/113605
PRIOR FILING DATE: 1998-12-23
PRIOR APPLICATION NUMBER: 60/113621
PRIOR FILING DATE: 1998-12-23
PRIOR APPLICATION NUMBER: 60/115558
PRIOR FILING DATE: 1999-01-12
PRIOR APPLICATION NUMBER: 60/115565
PRIOR FILING DATE: 1999-01-12
PRIOR APPLICATION NUMBER: 60/115733
PRIOR FILING DATE: 1999-01-12
PRIOR APPLICATION NUMBER: 60/119549
PRIOR FILING DATE: 1999-02-10
PRIOR APPLICATION NUMBER: 60/123618
PRIOR FILING DATE: 1999-03-10
PRIOR APPLICATION NUMBER: 60/125259
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: 60/125775
PRIOR FILING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 60/126773
PRIOR FILING DATE: 1999-03-29
PRIOR APPLICATION NUMBER: 60/127887
PRIOR FILING DATE: 1999-04-05
PRIOR APPLICATION NUMBER: 60/130232
PRIOR FILING DATE: 1999-04-21
PRIOR APPLICATION NUMBER: 60/131022
PRIOR FILING DATE: 1999-04-26
PRIOR APPLICATION NUMBER: 60/131270
PRIOR FILING DATE: 1999-04-27
PRIOR APPLICATION NUMBER: 60/131291
PRIOR FILING DATE: 1999-04-27
PRIOR APPLICATION NUMBER: 60/131445
PRIOR FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: 60/134287
PRIOR FILING DATE: 1999-05-14
PRIOR APPLICATION NUMBER: 60/140650
PRIOR FILING DATE: 1999-06-22
PRIOR APPLICATION NUMBER: 60/140723
PRIOR FILING DATE: 1999-06-22
PRIOR APPLICATION NUMBER: 60/141037
PRIOR FILING DATE: 1999-06-23
PRIOR APPLICATION NUMBER: 60/144758
PRIOR FILING DATE: 1999-07-20
PRIOR APPLICATION NUMBER: 60/145698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: 60/146222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: 60/146963

```

; PRIOR FILING DATE: 1999-08-03
; PRIOR APPLICATION NUMBER: 60/149320
; PRIOR FILING DATE: 1999-08-17
; PRIOR APPLICATION NUMBER: 60/149638
; PRIOR FILING DATE: 1999-08-17
; PRIOR APPLICATION NUMBER: 60/151733
; PRIOR FILING DATE: 1999-08-31
; PRIOR APPLICATION NUMBER: 60/164418
; PRIOR FILING DATE: 1999-11-09
; PRIOR APPLICATION NUMBER: 60/166361
; PRIOR FILING DATE: 1999-11-16
; PRIOR APPLICATION NUMBER: 60/169445
; PRIOR FILING DATE: 1999-12-07
; PRIOR APPLICATION NUMBER: 60/169495
; PRIOR FILING DATE: 1999-12-07
; PRIOR APPLICATION NUMBER: 60/169835
```

```
Query Match      70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      ||: |||
Db      64 ISQLRHYC 71
```

RESULT 32

```
US-10-219-061-226
; Sequence 226, Application US/10219061
; Publication No. US20060074224A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Desnoyers, Luc
; APPLICANT: Gerritsen, Mary
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe F.
; APPLICANT: Watanabe, Colin L.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3530PIC16
; CURRENT APPLICATION NUMBER: US/10/219,061
; PRIOR FILING DATE: 2002-08-12
; PRIOR APPLICATION NUMBER: 10/119,480
; PRIOR FILING DATE: 2002-04-09
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/063549
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/064103
; PRIOR FILING DATE: 1997-10-31
; PRIOR APPLICATION NUMBER: 60/069873
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 246
; SEQ ID NO 226
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
```

US-10-219-061-226

```
Query Match      70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      ||: |||
Db      64 ISQLRHYC 71
```

RESULT 33

```
US-10-219-062-226
; Sequence 226, Application US/10219062
; Publication No. US20060074220A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Desnoyers, Luc
; APPLICANT: Gerritsen, Mary
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe F.
; APPLICANT: Watanabe, Colin L.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3530PIC17
; CURRENT APPLICATION NUMBER: US/10/219,062
; PRIOR FILING DATE: 2002-08-12
; PRIOR APPLICATION NUMBER: 10/119,480
; PRIOR FILING DATE: 2002-04-09
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/063549
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/064103
; PRIOR FILING DATE: 1997-10-31
; PRIOR APPLICATION NUMBER: 60/069873
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 246
; SEQ ID NO 226
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
```

```
US-10-219-064-226
; Sequence 226, Application US/10219064
; Publication No. US20060074221A1
```

```
QY      2 ISEYRHYC 9
      ||: |||
Db      64 ISQLRHYC 71

Query Match      70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```

; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Desnoyers, Luc
; APPLICANT: Gerritsen, Mary
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe F.
; APPLICANT: Watanabe, Colin L.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3530PIC14
; CURRENT FILING DATE: 2002-08-13
; PRIOR APPLICATION NUMBER: 10/119,480
; PRIOR FILING DATE: 2002-04-09
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 246
; SEQ ID NO 226
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-219-064-226

Query Match          70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      2 ISEYRHYC 9
      ||: |||
      64 ISQLRHYC 71

RESULT 35
; US-10-233-134-226
; Sequence 226, Application US/10233134
; Publication No. US20060073476A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Desnoyers, Luc
; APPLICANT: Gerritsen, Mary
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe F.
; APPLICANT: Watanabe, Colin L.
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3530PIC113
```

```

; CURRENT APPLICATION NUMBER: US/10/233,134
; CURRENT FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: 10/119,480
; PRIOR FILING DATE: 2002-04-09
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/063549
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/064103
; PRIOR FILING DATE: 1997-10-31
; PRIOR APPLICATION NUMBER: 60/069873
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 246
; SEQ ID NO 226
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-233-134-226

Query Match          70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      2 ISEYRHYC 9
      ||: |||
      64 ISQLRHYC 71

RESULT 36
; US-10-137-873A-550
; Sequence 550, Application US/10137873A
; Publication No. US20060084138A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RIC149
; CURRENT APPLICATION NUMBER: US/10/137, 873A
; CURRENT FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
```



```

; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See file Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 550
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-137-873A-550
```

```

Query Match          70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      ||:||||
Db      64 ISQLRHYC 71
```

```

RESULT 37
US-10-152-370-550
; Sequence 550, Application US/10152370
; Publication No. US20060084139A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C407
; CURRENT APPLICATION NUMBER: US/10/152,370
; PRIOR FILING DATE: 2002-05-21
; Remaining Prior Application removed - See file Wrapper or PALM
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 550
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-152-370-550
```

```

Query Match          70.4%; Score 38; DB 9; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      ||:||||
Db      64 ISQLRHYC 71
```

```

RESULT 38
US-11-290-153-550
; Sequence 550, Application US/11290153
; Publication No. US20060073568A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C321
; CURRENT APPLICATION NUMBER: US/11/290,153
; PRIOR FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US/10/146,728
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See file Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 550
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Homo Sapien
US-11-290-153-550
```

```

Query Match          70.4%; Score 38; DB 11; Length 198;
Best Local Similarity 75.0%; Pred. No. 15;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 ISEYRHYC 9
      ||:||||
Db      64 ISQLRHYC 71
```

```

RESULT 39
US-10-530-061-71
; Sequence 71, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
```

```

; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 71
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-71

Query Match      68.5%; Score 37; DB 9; Length 9;
Best Local Similarity 85.7%; Pred. No. 1.9e+05;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 ISEYRHY 8
       ||:||||
Db      1 ITEYRHY 7

RESULT 40
US-10-530-061-72
; Sequence 72, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 72
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-72

Query Match      68.5%; Score 37; DB 9; Length 9;
Best Local Similarity 85.7%; Pred. No. 1.9e+05;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 ISEYRHY 8
       ||:||||
Db      1 ISDYRHY 7

RESULT 41
US-10-530-061-73
; Sequence 73, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
```

```

; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 73
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-73

Query Match      68.5%; Score 37; DB 9; Length 9;
Best Local Similarity 85.7%; Pred. No. 1.9e+05;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 ISEYRHY 8
       ||:||||
Db      1 ITEYRHY 7

RESULT 42
US-10-530-061-74
; Sequence 74, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 74
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-74

Query Match      68.5%; Score 37; DB 9; Length 9;
Best Local Similarity 85.7%; Pred. No. 1.9e+05;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 ISEYRHY 8
       ||:||||
Db      1 ISDYRHY 7

RESULT 43
US-10-530-061-121
; Sequence 121, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
```

```

; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 121
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
; US-10-530-061-121

Query Match
Best Local Similarity 68.5%; Score 37; DB 9; Length 9;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 ISEYRHY 8
Db 1 ISDYRHY 7

RESULT 44
US-10-530-061-123
; Sequence 123, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SOUTHWOOD, JOHN
; APPLICANT: SIDNEY, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-W
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 123
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
; US-10-530-061-123

Query Match
Best Local Similarity 68.5%; Score 37; DB 9; Length 9;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 ISEYRHY 8
Db 1 ISDYRHY 7

RESULT 45
US-10-519-122-78
; Sequence 78, Application US/10519122
; Publication No. US20060058252A1
; GENERAL INFORMATION:
; APPLICANT: Clawson, Gary A.
; APPLICANT: Pan, Wei-Hua
; APPLICANT: Thiboutot, Diane
; APPLICANT: Christensen, Neil
; TITLE OF INVENTION: METHODS AND MATERIALS FOR TREATING HUMAN
; FILE REFERENCE: 14017-008US1
; CURRENT APPLICATION NUMBER: US/10/519,122
; PRIOR FILING DATE: 2004-12-22
; PRIOR APPLICATION NUMBER: PCT/US03/20340
; PRIOR FILING DATE: 2003-06-26
; PRIOR APPLICATION NUMBER: US 60/449,066
```

```

; PRIOR FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 60/417,997
; PRIOR FILING DATE: 2002-10-14
; PRIOR APPLICATION NUMBER: US 60/391,795
; PRIOR FILING DATE: 2002-06-26
; NUMBER OF SEQ ID NOS: 84
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 78
; LENGTH: 17
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetically generated polypeptide
; US-10-519-122-78

Query Match
Best Local Similarity 64.8%; Score 35; DB 9; Length 17;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KISEYRHY 8
Db 6 KINQYRHF 13

RESULT 46
US-11-256-548-11
; Sequence 11, Application US/11256548
; Publication No. US20060051351A1
; GENERAL INFORMATION:
; APPLICANT: Godowski, Paul J., Mark, Melanie Rose, Zhang, Dong Xiao
; TITLE OF INVENTION: ErbB Receptor-Specific Neuregulin Related
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESS: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/11/256,548
; FILING DATE: 21-Oct-2005
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Conley, Delidre J.
; REGISTRATION NUMBER: 36,487
; REFERENCE/DOCKET NUMBER: P1084R1-2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-2066
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 45 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; FEATURE:
; NAME/KEY: hBTC.e1g
; LOCATION: 1-45
; IDENTIFICATION METHOD:
; OTHER INFORMATION:
; SEQUENCE DESCRIPTION: SEQ ID NO: 11:
; US-11-256-548-11

Query Match
Best Local Similarity 64.8%; Score 35; DB 11; Length 45;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

QY 4 EYRHYC 9
:|||||
Db 8 QYKHYC 13

RESULT 47
US-11-172-610-10

/ Sequence 10, Application US/11172610
/ Publication No. US20060014690A1
/ GENERAL INFORMATION:
/ APPLICANT: Bishop, Jeffrey S.
/ APPLICANT: Loomis, A. Katrina
/ APPLICANT: Monticello, Daniel J.
/ APPLICANT: Plenkow, Philip T.
/ TITLE OF INVENTION: Epidermal Growth Factor Receptor
/ TITLE OF INVENTION: Antagonists and Methods of Use
/ FILE REFERENCE: 3530.1002 US2
/ CURRENT APPLICATION NUMBER: US/11/172,610
/ PRIOR FILING DATE: 2005-06-30
/ PRIOR APPLICATION NUMBER: 60/643,082
/ PRIOR FILING DATE: 2005-01-11
/ PRIOR APPLICATION NUMBER: 60/584,471
/ PRIOR FILING DATE: 2004-06-30
/ NUMBER OF SEQ ID NOS: 12
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 10
/ LENGTH: 123
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic
US-11-172-610-10

Query Match 64.8%; Score 35; DB 11; Length 123;
Best Local Similarity 66.7%; Pred. No. 32;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 4 EYRHYC 9
:|||||
Db 72 QYKHYC 77

RESULT 48
US-10-530-253-18

/ Sequence 18, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casaccia, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 18
/ LENGTH: 149
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 35
US-10-530-253-18

Query Match 64.8%; Score 35; DB 9; Length 149;
Best Local Similarity 87.5%; Pred. No. 38;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 KISEYRHY 8
|||||||

Db 72 KISEYRMY 79

RESULT 49
US-10-530-061-128

/ Sequence 128, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SOUTHWOOD, SCOTT
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.03US02/EKS/M-M
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 128
/ LENGTH: 10
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-128

Query Match 63.0%; Score 34; DB 9; Length 10;
Best Local Similarity 83.3%; Pred. No. 5.4;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 EYRHYC 9
|||||
Db 1 EYDHYC 6

RESULT 50
US-10-530-061-853

/ Sequence 853, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SOUTHWOOD, SCOTT
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.03US02/EKS/M-M
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 853
/ LENGTH: 10
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-853

Query Match 63.0%; Score 34; DB 9; Length 10;
Best Local Similarity 83.3%; Pred. No. 5.4;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 EYRHYC 9
|||||
Db 1 EYDHYC 6

Tue May 9 09:28:06 2006

us-08-170-344-11.rapbn

Page 23

Search completed: May 5, 2006, 08:08:00
Job time : 10.5 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using BW model

Run on: May 5, 2006, 01:33:35 ; Search time 18.2 Seconds
(without alignments)
40.884 Million cell updates/sec

Title: US-08-170-344-12
Perfect score: 52
Sequence: 1 PLCDLIRC 9

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/prodata/1/1aa/5-COMB.pep:*
2: /cgn2_6/prodata/1/1aa/6-COMB.pep:*
3: /cgn2_6/prodata/1/1aa/8-COMB.pep:*
4: /cgn2_6/prodata/1/1aa/ECTUS-COMB.pep:*
5: /cgn2_6/prodata/1/1aa/RE-COMB.pep:*
6: /cgn2_6/prodata/1/1aa/Backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	52	100.0	20	1 US-08-934-915-45	Sequence 45, Appl
2	52	100.0	151	2 US-09-701-080C-18	Sequence 18, Appl
3	52	100.0	158	2 US-09-980-523A-2	Sequence 2, Appl1
4	52	100.0	162	1 US-08-316-239B-3	Sequence 3, Appl1
5	52	100.0	162	1 US-08-316-239B-4	Sequence 4, Appl1
6	52	100.0	172	2 US-08-860-165-12	Sequence 12, Appl
7	52	100.0	172	2 US-09-359-382-12	Sequence 12, Appl
8	52	100.0	243	2 US-09-462-993-1	Sequence 1, Appl1
9	52	100.0	266	2 US-08-860-165-10	Sequence 10, Appl
10	52	100.0	266	2 US-09-359-382-10	Sequence 10, Appl
11	52	100.0	266	2 US-09-367-309A-1	Sequence 1, Appl1
12	52	100.0	273	2 US-09-485-885-10	Sequence 4, Appl1
13	52	100.0	273	2 US-09-485-885-10	Sequence 10, Appl
14	52	100.0	371	2 US-09-485-885-6	Sequence 6, Appl1
15	52	100.0	390	2 US-09-485-885-14	Sequence 14, Appl
16	47	90.4	20	1 US-08-934-915-164	Sequence 164, App
17	38	73.1	29	2 US-09-980-523A-8	Sequence 8, Appl1
18	36	69.2	172	2 US-09-248-796A-20508	Sequence 20508, A
19	36	69.2	343	2 US-09-902-540-12017	Sequence 12017, A
20	35	67.3	348	2 US-09-489-039A-13746	Sequence 13746, A
21	35	67.3	407	2 US-10-104-047-3074	Sequence 3074, Ap
22	35	67.3	687	2 US-09-252-991A-31650	Sequence 31650, A
23	34	65.4	10	2 US-09-574-799B-43	Sequence 43, Appl
24	34	65.4	104	2 US-09-270-767-33183	Sequence 33183, A
25	34	65.4	104	2 US-09-270-767-33183	Sequence 48400, A
26	34	65.4	109	2 US-09-270-767-34129	Sequence 34129, A
27	34	65.4	109	2 US-09-270-767-49346	Sequence 49346, A

28	34	65.4	146	2 US-09-640-211A-1032	Sequence 1032, Ap
29	34	65.4	166	2 US-09-228-986-113	Sequence 113, App
30	34	65.4	166	2 US-10-101-464A-113	Sequence 113, App
31	34	65.4	321	2 US-09-498-520A-18	Sequence 18, Appl
32	34	65.4	527	1 US-08-246-583-2	Sequence 2, Appl1
33	34	65.4	537	2 US-09-949-016-7509	Sequence 7509, Ap
34	34	65.4	538	1 US-08-933-227-5	Sequence 5, Appl1
35	34	65.4	538	2 US-09-636-791A-4	Sequence 4, Appl1
36	34	65.4	538	2 US-09-538-082-1186	Sequence 1186, Ap
37	34	65.4	538	2 US-08-444-994-11	Sequence 11, Appl
38	34	65.4	540	2 US-09-949-016-8190	Sequence 8190, Ap
39	34	65.4	542	1 US-08-246-583-3	Sequence 3, Appl1
40	34	65.4	542	2 US-09-636-791A-5	Sequence 5, Appl1
41	34	65.4	542	2 US-09-538-082-672	Sequence 672, App
42	34	65.4	542	2 US-08-444-994-12	Sequence 12, Appl
43	34	65.4	546	2 US-09-248-796A-19179	Sequence 19179, A
44	34	65.4	556	2 US-10-104-047-2810	Sequence 2810, Ap
45	34	65.4	795	2 US-09-489-039A-12083	Sequence 12083, A
46	33	63.5	81	2 US-09-513-999C-4376	Sequence 4376, Ap
47	33	63.5	120	2 US-09-270-767-35225	Sequence 35225, A
48	33	63.5	155	2 US-09-270-767-50442	Sequence 50442, A
49	33	63.5	155	2 US-09-902-540-12712	Sequence 12712, A
50	33	63.5	293	2 US-09-489-039A-13053	Sequence 13053, A
51	33	63.5	313	2 US-09-199-637A-174	Sequence 174, App
52	33	63.5	338	2 US-09-252-991A-17390	Sequence 17390, A
53	33	63.5	346	2 US-09-949-016-5875	Sequence 5875, Ap
54	33	63.5	366	2 US-09-949-016-10454	Sequence 10454, A
55	33	63.5	372	2 US-08-513-278-2	Sequence 2, Appl1
56	33	63.5	524	6 US-09-902-540-10522	Sequence 10522, A
57	33	63.5	524	2 US-09-187-906-7	Sequence 7, Appl1
58	33	63.5	637	2 US-09-489-407-7	Sequence 7, Appl1
59	33	63.5	726	2 US-09-538-092-488	Sequence 488, App
60	33	63.5	832	2 US-09-538-092-88	Sequence 88, Appl
61	33	63.5	982	2 US-09-248-796A-20628	Sequence 20628, A
62	33	63.5	1872	1 US-08-188-582-14	Sequence 14, Appl
63	33	63.5	1872	1 US-08-646-715-14	Sequence 14, Appl
64	33	63.5	1884	2 US-09-949-016-7154	Sequence 7154, Ap
65	33	63.5	1893	1 US-08-188-582-11	Sequence 11, Appl
66	33	63.5	1893	1 US-08-646-715-11	Sequence 11, Appl
67	33	63.5	2594	2 US-08-718-388-9	Sequence 9, Appl1
68	33	63.5	5405	2 US-08-718-388-9	Sequence 389, App
69	33	63.5	5405	2 US-09-149-476-389	Sequence 5742, Ap
70	32	61.5	59	2 US-10-104-047-2077	Sequence 2077, Ap
71	32	61.5	167	2 US-09-248-796A-19893	Sequence 19893, A
72	32	61.5	184	2 US-09-252-991A-30186	Sequence 30186, A
73	32	61.5	204	2 US-09-489-039A-9681	Sequence 9681, Ap
74	32	61.5	233	2 US-09-270-767-57554	Sequence 57554, A
75	32	61.5	262	2 US-09-828-302-13	Sequence 13, Appl
76	32	61.5	306	2 US-09-538-092-854	Sequence 854, App
77	32	61.5	309	2 US-09-538-092-902	Sequence 902, App
78	32	61.5	309	2 US-09-949-016-6461	Sequence 6461, Ap
79	32	61.5	311	2 US-09-949-016-11335	Sequence 11335, A
80	32	61.5	325	2 US-09-190-976B-10	Sequence 10, Appl
81	32	61.5	325	2 US-09-949-016-8780	Sequence 8780, Ap
82	32	61.5	341	2 US-09-949-016-11414	Sequence 11414, A
83	32	61.5	355	2 US-09-487-558B-368	Sequence 268, App
84	32	61.5	369	2 US-09-487-558B-370	Sequence 270, App
85	32	61.5	377	2 US-09-270-767-42272	Sequence 42272, A
86	32	61.5	410	2 US-09-489-039A-10078	Sequence 10078, A
87	32	61.5	410	2 US-09-489-039A-7867	Sequence 7867, Ap
88	32	61.5	449	2 US-09-489-039A-10078	Sequence 44138, A
89	32	61.5	481	2 US-09-452-722-7	Sequence 7, Appl1
90	32	61.5	487	1 US-08-404-731A-7	Sequence 7, Appl1
91	32	61.5	487	1 US-08-344-227-7	Sequence 7, Appl1
92	32	61.5	487	1 US-08-503-226B-7	Sequence 7, Appl1
93	32	61.5	487	1 US-08-721-458B-7	Sequence 2, Appl1
94	32	61.5	487	2 US-09-517-779-2	Sequence 7, Appl1
95	32	61.5	499	2 US-09-949-016-7370	Sequence 7370, Ap
96	32	61.5	528	2 US-09-744-016A-9	Sequence 9, Appl1
97	32	61.5	530	2 US-09-949-016-11683	Sequence 11683, A
98	32	61.5	535	2 US-09-744-016A-24	Sequence 24, Appl
99	32	61.5			
100	32	61.5			

101	32	61.5	542	2	US-09-198-452A-496	Sequence 496, App	174	31	59.6	1127	2	US-09-949-016-7672	Sequence 7672, Ap
102	32	61.5	553	2	US-09-744-016A-27	Sequence 27, Appl	175	31	59.6	1127	2	US-09-949-016-7673	Sequence 7674, Ap
103	32	61.5	554	2	US-08-904-871-1	Sequence 1, Appl1	176	31	59.6	1127	2	US-09-949-016-7674	Sequence 8766, Ap
104	32	61.5	611	2	US-08-904-871-4	Sequence 4, Appl1	177	31	59.6	1127	2	US-09-949-016-8766	Sequence 8767, Ap
105	32	61.5	621	2	US-09-198-452A-389	Sequence 389, App	178	31	59.6	1127	2	US-09-949-016-8767	Sequence 8768, Ap
106	32	61.5	621	2	US-09-438-185A-375	Sequence 375, App	179	31	59.6	1127	2	US-09-949-016-8768	Sequence 8769, Ap
107	32	61.5	662	2	US-09-438-185A-464	Sequence 464, App	180	31	59.6	1127	2	US-09-949-016-8769	Sequence 8603, Ap
108	32	61.5	696	2	US-08-904-871-12	Sequence 12, Appl	181	31	59.6	1558	2	US-09-949-016-7371	Sequence 7371, Ap
109	32	61.5	1142	2	US-10-227-035-1	Sequence 1, Appl1	182	31	59.6	1606	2	US-09-949-016-9656	Sequence 9656, Ap
110	31	59.6	53	2	US-09-902-540-10671	Sequence 10671, A	183	31	59.6	2357	2	US-09-962-756-816	Sequence 820, App
111	31	59.6	60	2	US-09-270-767-33990	Sequence 33990, A	184	30	57.7	20	2	US-09-962-756-820	Sequence 831, App
112	31	59.6	60	2	US-09-270-767-49207	Sequence 49207, A	185	30	57.7	20	2	US-09-962-756-831	Sequence 12, Appl
113	31	59.6	129	2	US-09-674-320B-2	Sequence 2, Appl1	186	30	57.7	60	2	US-09-215-221-12	Sequence 18, Appl
114	31	59.6	134	2	US-09-270-767-62175	Sequence 62175, A	187	30	57.7	98	2	US-09-047-125-18	Sequence 18, Appl
115	31	59.6	135	2	US-09-252-991A-25164	Sequence 25164, A	188	30	57.7	98	2	US-07-736-335E-18	Sequence 15, Appl
116	31	59.6	137	2	US-09-270-767-56383	Sequence 56383, A	189	30	57.7	98	2	US-09-270-767-11962	Sequence 31982, A
117	31	59.6	138	2	US-08-586-039B-37	Sequence 37, Appl	190	30	57.7	104	2	US-09-270-767-47139	Sequence 47199, A
118	31	59.6	138	2	US-09-699-769-37	Sequence 37, Appl	191	30	57.7	104	2	US-08-469-260A-226	Sequence 226, App
119	31	59.6	138	2	US-10-071-370A-6	Sequence 6, Appl1	192	30	57.7	106	2	US-08-488-446-226	Sequence 226, App
120	31	59.6	158	2	US-08-586-039B-39	Sequence 39, Appl	193	30	57.7	106	2	US-08-467-344A-226	Sequence 226, App
121	31	59.6	158	2	US-09-699-769-39	Sequence 39, Appl	194	30	57.7	106	2	US-08-454-550B-226	Sequence 226, App
122	31	59.6	158	2	US-10-071-370A-4	Sequence 4, Appl1	195	30	57.7	106	2	US-09-270-767-40608	Sequence 40608, A
123	31	59.6	262	2	US-10-104-047-2006	Sequence 2006, Appl	196	30	57.7	117	2	US-09-270-767-55824	Sequence 55824, A
124	31	59.6	263	2	US-09-270-767-43093	Sequence 43093, A	197	30	57.7	117	2	US-09-605-703B-970	Sequence 970, App
125	31	59.6	276	2	US-09-543-681A-6382	Sequence 6382, Ap	198	30	57.7	124	2	US-09-215-221-28	Sequence 28, Appl
126	31	59.6	306	2	US-09-252-991A-32756	Sequence 32756, A	199	30	57.7	132	2	US-09-252-991A-20331	Sequence 20331, A
127	31	59.6	309	2	US-09-058-489-7	Sequence 7, Appl1	200	30	57.7	141	2	US-09-270-767-40383	Sequence 40383, A
128	31	59.6	319	1	US-08-597-236-7	Sequence 7, Appl1	201	30	57.7	146	2	US-09-270-767-55599	Sequence 55599, A
129	31	59.6	319	1	US-08-746-682A-7	Sequence 7, Appl1	202	30	57.7	146	2	US-09-248-796A-20478	Sequence 20478
130	31	59.6	440	2	US-09-489-039A-12132	Sequence 12132, A	203	30	57.7	148	2	US-09-489-039A-13888	Sequence 13888, A
131	31	59.6	468	2	US-09-252-991A-30558	Sequence 30558, A	204	30	57.7	150	2	US-09-270-767-13471	Sequence 13471, A
132	31	59.6	473	2	US-10-332-795-8	Sequence 8, Appl1	205	30	57.7	160	2	US-09-270-767-48688	Sequence 48688, A
133	31	59.6	478	2	US-09-147-522-2	Sequence 2, Appl1	206	30	57.7	160	2	US-09-252-991A-31056	Sequence 31056, A
134	31	59.6	486	2	US-09-147-522-4	Sequence 4, Appl1	207	30	57.7	180	2	US-09-270-767-61085	Sequence 61085, A
135	31	59.6	486	2	US-09-147-522-6	Sequence 6, Appl1	208	30	57.7	187	2	US-09-248-796A-16235	Sequence 16235, A
136	31	59.6	491	2	US-09-030-335-2	Sequence 2, Appl1	209	30	57.7	202	2	US-09-912-962-49	Sequence 49, Appl
137	31	59.6	502	2	US-09-949-016-6642	Sequence 6642, Ap	210	30	57.7	202	2	US-09-270-767-77507	Sequence 77507, A
138	31	59.6	509	2	US-09-744-016A-12	Sequence 12, Appl	211	30	57.7	202	2	US-09-270-767-52724	Sequence 52724, A
139	31	59.6	514	2	US-09-744-016A-30	Sequence 30, Appl	212	30	57.7	202	2	US-09-418-710-63	Sequence 63, Appl
140	31	59.6	524	2	US-09-489-039A-9361	Sequence 9361, Ap	213	30	57.7	211	2	US-09-839-479-62	Sequence 479, Appl
141	31	59.6	531	2	US-09-949-016-11179	Sequence 11179, A	214	30	57.7	212	2	US-09-252-991A-19970	Sequence 19970, A
142	31	59.6	535	2	US-09-058-489-40	Sequence 40, Appl	215	30	57.7	212	2	US-09-949-016-7556	Sequence 7556, Ap
143	31	59.6	541	2	US-09-270-767-46580	Sequence 46580, A	216	30	57.7	220	2	US-09-270-767-60635	Sequence 60635, Ap
144	31	59.6	549	2	US-09-058-489-39	Sequence 39, Appl	217	30	57.7	220	2	US-09-543-681A-7481	Sequence 7481, Ap
145	31	59.6	554	2	US-09-270-767-43597	Sequence 43597, A	218	30	57.7	221	2	US-10-104-047-2517	Sequence 2517, Ap
146	31	59.6	600	2	US-08-904-871-3	Sequence 3, Appl1	219	30	57.7	222	6	US-09-902-540-12687	Sequence 12687
147	31	59.6	679	2	US-09-949-016-7268	Sequence 7268, Ap	220	30	57.7	222	6	US-09-605-703B-968	Sequence 968, App
148	31	59.6	718	2	US-09-252-991A-33109	Sequence 33109, A	221	30	57.7	222	6	US-09-489-039A-14220	Sequence 14220, A
149	31	59.6	748	1	US-08-920-234-2	Sequence 2, Appl1	222	30	57.7	224	2	US-09-636-499-9	Sequence 9, Appl1
150	31	59.6	748	1	US-08-937-931-4	Sequence 4, Appl1	223	30	57.7	224	2	US-09-636-499-24	Sequence 24, Appl
151	31	59.6	748	1	US-09-285-502-4	Sequence 4, Appl1	224	30	57.7	225	2	US-09-270-767-53701	Sequence 53701, A
152	31	59.6	748	2	US-09-030-335-9	Sequence 9, Appl1	225	30	57.7	225	2	US-09-270-767-45143	Sequence 45143, Ap
153	31	59.6	748	2	US-09-709-126-4	Sequence 4, Appl1	226	30	57.7	226	2	US-09-433-241A-10	Sequence 241A-10
154	31	59.6	748	2	US-09-871-385A-4	Sequence 8, Appl1	227	30	57.7	227	2	US-09-270-767-45143	Sequence 45143, Ap
155	31	59.6	748	2	US-09-937-931-8	Sequence 8, Appl1	228	30	57.7	228	2	US-09-270-767-45143	Sequence 45143, Ap
156	31	59.6	749	1	US-09-285-502-8	Sequence 8, Appl1	229	30	57.7	229	2	US-09-270-767-45143	Sequence 45143, Ap
157	31	59.6	749	1	US-09-709-126-8	Sequence 8, Appl1	230	30	57.7	230	2	US-09-270-767-45143	Sequence 45143, Ap
158	31	59.6	749	2	US-09-871-385A-8	Sequence 8, Appl1	231	30	57.7	231	2	US-09-270-767-45143	Sequence 45143, Ap
159	31	59.6	749	2	US-09-949-016-10631	Sequence 10631, A	232	30	57.7	232	2	US-09-270-767-45143	Sequence 45143, Ap
160	31	59.6	761	2	US-09-949-016-11424	Sequence 11424, A	233	30	57.7	233	2	US-09-270-767-45143	Sequence 45143, Ap
161	31	59.6	772	2	US-09-030-335-4	Sequence 4, Appl1	234	30	57.7	234	2	US-09-270-767-45143	Sequence 45143, Ap
162	31	59.6	799	2	US-09-949-016-6870	Sequence 6870, Ap	235	30	57.7	235	2	US-09-270-767-45143	Sequence 45143, Ap
163	31	59.6	854	2	US-09-949-016-6873	Sequence 6873, Ap	236	30	57.7	236	2	US-09-270-767-45143	Sequence 45143, Ap
164	31	59.6	1072	2	US-09-949-016-6873	Sequence 6873, Ap	237	30	57.7	237	2	US-09-270-767-45143	Sequence 45143, Ap
165	31	59.6	1085	2	US-09-949-016-8762	Sequence 8762, Ap	238	30	57.7	238	2	US-09-270-767-45143	Sequence 45143, Ap
166	31	59.6	1085	2	US-09-949-016-8763	Sequence 8763, Ap	239	30	57.7	239	2	US-09-270-767-45143	Sequence 45143, Ap
167	31	59.6	1085	2	US-09-949-016-8764	Sequence 8764, Ap	240	30	57.7	240	2	US-09-270-767-45143	Sequence 45143, Ap
168	31	59.6	1085	2	US-09-949-016-8765	Sequence 8765, Ap	241	30	57.7	241	2	US-09-270-767-45143	Sequence 45143, Ap
169	31	59.6	1088	2	US-09-270-767-43052	Sequence 43052, A	242	30	57.7	242	2	US-09-270-767-45143	Sequence 45143, Ap
170	31	59.6	1106	2	US-09-949-016-6972	Sequence 6972, Ap	243	30	57.7	243	2	US-09-270-767-45143	Sequence 45143, Ap
171	31	59.6	1114	2	US-09-949-016-6975	Sequence 6975, Ap	244	30	57.7	244	2	US-09-270-767-45143	Sequence 45143, Ap
172	31	59.6	1114	2	US-09-949-016-6975	Sequence 6975, Ap	245	30	57.7	245	2	US-09-270-767-45143	Sequence 45143, Ap
173	31	59.6	1127	2	US-09-949-016-7671	Sequence 7671, Ap	246	30	57.7	246	2	US-09-270-767-45143	Sequence 45143, Ap

247	30	57.7	465	2	US-09-000-094-24	Sequence 24, Appl	320	29	55.8	149	2	US-08-586-039B-47	Sequence 47, Appl
248	30	57.7	465	2	US-10-011-749-24	Sequence 24, Appl	321	29	55.8	149	2	US-09-355-700-55	Sequence 55, Appl
249	30	57.7	466	2	US-09-215-221-24	Sequence 24, Appl	322	29	55.8	149	2	US-08-706-054A-5	Sequence 5, Appl
250	30	57.7	479	2	US-09-248-796A-20023	Sequence 20023, A	323	29	55.8	149	2	US-09-699-769-47	Sequence 47, Appl
251	30	57.7	485	2	US-09-540-236-2761	Sequence 2761, Ap	324	29	55.8	149	2	US-09-313-239-5	Sequence 54, Appl
252	30	57.7	498	2	US-09-252-991A-21973	Sequence 21973, A	325	29	55.8	149	2	US-08-671-573B-54	Sequence 54, Appl
253	30	57.7	502	2	US-09-949-016-10218	Sequence 10218, A	326	29	55.8	149	2	US-09-631-092B-54	Sequence 54, Appl
254	30	57.7	510	2	US-09-744-016A-6	Sequence 6, Appl1	327	29	55.8	149	2	US-09-468-647A-106	Sequence 106, App
255	30	57.7	521	2	US-09-252-991A-18266	Sequence 18266, A	328	29	55.8	149	2	US-09-949-016-6552	Sequence 6552, Ap
256	30	57.7	521	2	US-09-538-092-1283	Sequence 1283, Ap	329	29	55.8	149	2	US-09-534-376A-55	Sequence 3811, A
257	30	57.7	522	2	US-09-538-092-762	Sequence 762, App	330	29	55.8	153	2	US-09-270-767-38911	Sequence 54128, A
258	30	57.7	523	2	US-09-949-016-11263	Sequence 11263, A	331	29	55.8	153	2	US-09-270-767-54128	Sequence 41, Appl
259	30	57.7	523	2	US-09-744-016A-21	Sequence 21, Appl	332	29	55.8	154	2	US-08-586-039B-41	Sequence 41, Appl
260	30	57.7	533	2	US-09-744-016A-18	Sequence 18, Appl	333	29	55.8	154	2	US-09-699-769-41	Sequence 114, App
261	30	57.7	577	2	US-10-104-047-3148	Sequence 3148, Ap	334	29	55.8	155	2	US-09-370-839-114	Sequence 114, App
262	30	57.7	703	2	US-08-111-731A-152	Sequence 152, App	335	29	55.8	158	1	US-08-247-904B-10	Sequence 10, Appl
263	30	57.7	822	2	US-09-824-734-3	Sequence 3, Appl1	336	29	55.8	158	1	US-08-767-942A-19	Sequence 19, Appl
264	30	57.7	994	2	US-09-902-540-13822	Sequence 13822, A	337	29	55.8	159	2	US-09-949-016-9090	Sequence 9090, Ap
265	30	57.7	1587	2	US-09-000-094-46	Sequence 46, Appl	338	29	55.8	169	2	US-08-483-533-28	Sequence 28, Appl
266	30	57.7	1587	2	US-10-011-749-46	Sequence 46, Appl	339	29	55.8	169	2	US-09-283-471A-28	Sequence 8, Appl1
267	30	57.7	1673	2	US-09-418-710-70	Sequence 70, Appl	340	29	55.8	170	1	US-08-039-297B-8	Sequence 5, Appl1
268	30	57.7	1673	2	US-09-839-479-69	Sequence 69, Appl	341	29	55.8	170	1	US-08-586-039B-45	Sequence 45, Appl
269	30	57.7	1674	2	US-09-839-479-1	Sequence 1, Appl1	342	29	55.8	170	2	US-09-431-888-5	Sequence 28, Appl
270	30	57.7	1674	2	US-09-839-479-1	Sequence 1, Appl1	343	29	55.8	170	2	US-09-699-769-45	Sequence 28, Appl
271	29.5	56.7	316	2	US-09-328-352-8163	Sequence 8163, Ap	344	29	55.8	170	2	US-09-438-046-11	Sequence 11, Appl
272	29.5	56.7	1009	2	US-09-762-724-10	Sequence 10, Appl	345	29	55.8	170	2	US-09-214-988-32	Sequence 32, Appl
273	29	55.8	9	2	US-08-159-339A-565	Sequence 565, App	346	29	55.8	174	2	US-09-785-669-2	Sequence 2, Appl1
274	29	55.8	10	1	US-08-435-019-14	Sequence 13, Appl	348	29	55.8	176	2	US-09-949-016-6706	Sequence 6706, Ap
275	29	55.8	10	2	US-08-833-838B-13	Sequence 13, Appl	349	29	55.8	179	2	US-08-483-533-33	Sequence 33, Appl
276	29	55.8	15	1	US-09-438-019-10	Sequence 25, Appl	350	29	55.8	179	2	US-09-283-471A-33	Sequence 12, Appl
277	29	55.8	15	2	US-09-438-046-25	Sequence 17, Appl	351	29	55.8	181	2	US-08-848-580-12	Sequence 12, Appl
278	29	55.8	16	1	US-08-435-019-17	Sequence 1, Appl1	352	29	55.8	181	2	US-08-488-123-12	Sequence 12, Appl
279	29	55.8	26	1	US-08-296-898-1	Sequence 2, Appl1	353	29	55.8	187	2	US-09-949-016-11428	Sequence 11428, A
280	29	55.8	36	2	US-08-435-019-2	Sequence 59856, A	354	29	55.8	211	1	US-07-915-934-4	Sequence 4, Appl1
281	29	55.8	36	2	US-09-270-767-59856	Sequence 22, Appl	355	29	55.8	228	1	US-08-325-749-4	Sequence 19, Appl1
282	29	55.8	50	2	US-08-975-080-22	Sequence 22, Appl	356	29	55.8	228	2	US-09-182-145-19	Sequence 99, Appl
283	29	55.8	50	2	US-08-975-080-31	Sequence 31, Appl	357	29	55.8	229	2	US-09-182-145-98	Sequence 98, Appl
284	29	55.8	50	2	US-10-138-618-22	Sequence 22, Appl	358	29	55.8	230	2	US-09-182-145-97	Sequence 97, Appl
285	29	55.8	50	2	US-10-138-618-31	Sequence 31, Appl	359	29	55.8	231	2	US-09-182-145-96	Sequence 96, Appl
286	29	55.8	50	2	US-09-690-825-22	Sequence 22, Appl	360	29	55.8	232	2	US-09-182-145-95	Sequence 95, Appl
287	29	55.8	50	2	US-09-690-825-31	Sequence 31, Appl	361	29	55.8	233	2	US-09-182-145-94	Sequence 94, Appl
288	29	55.8	51	2	US-09-328-352-8091	Sequence 8091, Ap	362	29	55.8	234	2	US-09-182-145-93	Sequence 93, Appl
289	29	55.8	65	2	US-09-248-796A-22759	Sequence 22759, A	363	29	55.8	235	2	US-09-182-145-92	Sequence 92, Appl
290	29	55.8	75	2	US-09-248-796A-23423	Sequence 23423, A	364	29	55.8	237	2	US-09-182-145-91	Sequence 91, Appl
291	29	55.8	79	2	US-08-596-684F-6	Sequence 6, Appl1	365	29	55.8	237	2	US-09-489-039A-9365	Sequence 9365, Ap
292	29	55.8	79	2	US-09-515-356-1	Sequence 1, Appl1	366	29	55.8	238	2	US-09-182-145-90	Sequence 90, Appl
293	29	55.8	79	2	US-09-788-308F-2	Sequence 24, Appl	367	29	55.8	238	2	US-09-182-145-89	Sequence 89, Appl
294	29	55.8	83	2	US-08-905-223-458	Sequence 458, App	368	29	55.8	239	2	US-08-261-822A-75	Sequence 88, Appl
295	29	55.8	89	2	US-09-248-796A-25994	Sequence 25994, A	369	29	55.8	240	1	US-09-182-145-88	Sequence 88, Appl
296	29	55.8	112	1	US-09-193-877-4	Sequence 4, Appl1	370	29	55.8	240	4	PCT-US95-07744A-75	Sequence 75, Appl
297	29	55.8	126	2	US-08-483-533-31	Sequence 31, Appl	371	29	55.8	241	2	US-09-182-145-87	Sequence 87, Appl
298	29	55.8	126	2	US-09-283-471A-31	Sequence 31, Appl	372	29	55.8	242	2	US-09-182-145-86	Sequence 86, Appl
299	29	55.8	137	2	US-09-252-991A-27555	Sequence 27555, A	373	29	55.8	243	2	US-09-182-145-85	Sequence 85, Appl
300	29	55.8	137	2	US-09-252-991A-24579	Sequence 24579, A	374	29	55.8	244	2	US-09-182-145-84	Sequence 84, Appl
301	29	55.8	141	2	US-08-744-138-5	Sequence 5, Appl1	375	29	55.8	245	2	US-08-483-533-42	Sequence 42, Appl
302	29	55.8	141	2	US-08-744-138-6	Sequence 6, Appl1	376	29	55.8	245	2	US-09-283-471A-42	Sequence 42, Appl
303	29	55.8	141	2	US-09-431-480-11	Sequence 11, Appl	377	29	55.8	245	2	US-09-182-145-83	Sequence 83, Appl
304	29	55.8	141	2	US-09-617-302-11	Sequence 11, Appl	378	29	55.8	246	1	US-08-704-931-2	Sequence 82, Appl
305	29	55.8	141	2	US-09-241-376-5	Sequence 5, Appl1	379	29	55.8	246	2	US-09-182-145-82	Sequence 82, Appl
306	29	55.8	141	2	US-09-241-376-6	Sequence 6, Appl1	380	29	55.8	247	2	US-09-182-145-81	Sequence 81, Appl
307	29	55.8	141	2	US-09-940-497-5	Sequence 5, Appl1	381	29	55.8	248	2	US-09-182-145-80	Sequence 80, Appl
308	29	55.8	141	2	US-09-940-497-6	Sequence 6, Appl1	382	29	55.8	249	2	US-09-182-145-79	Sequence 79, Appl
309	29	55.8	141	2	US-08-849-303-22	Sequence 22, Appl	383	29	55.8	249	2	US-09-182-145-78	Sequence 78, Appl
310	29	55.8	141	2	US-08-849-303-24	Sequence 24, Appl	384	29	55.8	250	2	US-09-182-145-77	Sequence 77, Appl
311	29	55.8	141	2	US-08-248-796A-21163	Sequence 21163, A	385	29	55.8	251	2	US-09-182-145-76	Sequence 76, Appl
312	29	55.8	144	2	US-09-270-767-61408	Sequence 61408, A	386	29	55.8	252	2	US-08-483-533-43	Sequence 43, Appl
313	29	55.8	148	2	US-09-270-767-32420	Sequence 32420, A	387	29	55.8	252	2	US-09-283-471A-43	Sequence 43, Appl
314	29	55.8	148	2	US-09-270-767-47637	Sequence 47637, A	388	29	55.8	254	2	US-09-252-991A-30634	Sequence 30634, A
315	29	55.8	148	2	US-09-248-796A-25727	Sequence 25727, A	389	29	55.8	257	2	US-08-596-684F-7	Sequence 7, Appl1
316	29	55.8	149	1	US-08-469-427A-14	Sequence 14, Appl	390	29	55.8	258	2	US-08-483-533-26	Sequence 26, Appl
317	29	55.8	149	1	US-08-039-297B-2	Sequence 2, Appl1	391	29	55.8	258	2	US-09-283-471A-26	Sequence 26, Appl
318	29	55.8	149	1	US-08-569-063C-21	Sequence 21, Appl	392	29	55.8	258	2		
319	29	55.8	149	2	US-08-795-430-55	Sequence 55, Appl	392	29	55.8	258	2		

393	29	55.8	260	1	US-09-193-877-3	Sequence 3, Appl1	466	29	55.8	566	2	US-09-784-984B-51	Sequence 51, Appl1
394	29	55.8	260	1	US-09-193-877-6	Sequence 6, Appl1	467	29	55.8	566	2	US-09-949-016-6719	Sequence 6719, Ap
395	29	55.8	263	4	PCT-US91-06532-2	Sequence 2, Appl1	468	29	55.8	570	2	US-09-949-016-6907	Sequence 8907, Ap
396	29	55.8	264	2	US-08-483-533-40	Sequence 40, Appl1	469	29	55.8	574	2	US-09-248-796A-15283	Sequence 15283, A
397	29	55.8	264	2	US-09-283-471A-40	Sequence 40, Appl1	470	29	55.8	581	1	US-08-446-0108B-17	Sequence 17, Appl1
398	29	55.8	266	2	US-09-248-796A-18212	Sequence 18212, A	471	29	55.8	581	1	US-08-446-0108B-17	Sequence 17, Appl1
399	29	55.8	271	1	US-08-117-083-14	Sequence 14, Appl1	472	29	55.8	581	1	US-08-805-445-17	Sequence 17, Appl1
400	29	55.8	273	2	US-09-540-235-2730	Sequence 2730, Ap	473	29	55.8	581	1	US-08-064-067D-17	Sequence 17, Appl1
401	29	55.8	278	2	US-09-485-885-21	Sequence 21, Appl1	474	29	55.8	581	1	US-09-066-208-17	Sequence 17, Appl1
402	29	55.8	284	2	US-09-328-352-5307	Sequence 5307, Ap	475	29	55.8	587	1	US-08-871-268B-18	Sequence 18, Appl1
403	29	55.8	297	2	US-09-248-796A-18554	Sequence 18554, A	476	29	55.8	587	1	US-09-018-864A-18	Sequence 18, Appl1
404	29	55.8	311	2	US-09-487-558B-290	Sequence 290, App	477	29	55.8	587	2	US-08-871-267B-24	Sequence 24, Appl1
405	29	55.8	319	2	US-09-949-016-9126	Sequence 9126, Ap	478	29	55.8	587	2	US-09-618-419-5-17	Sequence 24, Appl1
406	29	55.8	337	2	US-09-248-796A-15798	Sequence 15798, A	479	29	55.8	591	2	US-09-201-356-42	Sequence 42, Appl1
407	29	55.8	339	2	US-09-800-729-128	Sequence 128, App	480	29	55.8	591	2	US-09-011-356-42	Sequence 42, Appl1
408	29	55.8	339	2	US-09-800-729-129	Sequence 129, App	481	29	55.8	591	2	US-09-672-717-429	Sequence 229, App
409	29	55.8	341	2	US-09-270-767-45876	Sequence 45876, A	482	29	55.8	591	2	US-09-201-932-42	Sequence 42, Appl1
410	29	55.8	342	2	US-09-328-352-6378	Sequence 6378, Ap	483	29	55.8	593	2	US-09-949-016-7031	Sequence 7031, Ap
411	29	55.8	348	2	US-09-252-991A-30224	Sequence 30224, A	484	29	55.8	596	2	US-09-949-016-8124	Sequence 8124, Ap
412	29	55.8	354	2	US-09-198-452A-350	Sequence 350, App	485	29	55.8	612	2	US-09-212-971-14	Sequence 14, Appl1
413	29	55.8	354	2	US-09-438-185A-331	Sequence 331, App	486	29	55.8	612	2	US-08-800-929A-14	Sequence 14, Appl1
414	29	55.8	355	2	US-08-483-533-41	Sequence 41, Appl1	487	29	55.8	612	2	US-08-569-749-9	Sequence 14, Appl1
415	29	55.8	355	2	US-09-283-471A-41	Sequence 41, Appl1	488	29	55.8	612	2	US-09-617-053A-14	Sequence 14, Appl1
416	29	55.8	355	2	US-09-902-540-13397	Sequence 13397, A	489	29	55.8	612	2	US-09-689-366-14	Sequence 14, Appl1
417	29	55.8	355	2	PCT-US91-06532-3	Sequence 3, Appl1	490	29	55.8	612	2	US-10-233-286-14	Sequence 14, Appl1
418	29	55.8	356	2	US-09-543-681A-7991	Sequence 7991, Ap	491	29	55.8	612	4	PCT-US96-12860-14	Sequence 14, Appl1
419	29	55.8	370	2	US-09-800-729-215	Sequence 215, App	492	29	55.8	618	1	US-08-511-485-8	Sequence 8, Appl1
420	29	55.8	372	1	US-09-902-540-9972	Sequence 9972, Ap	493	29	55.8	618	1	US-09-212-971-8	Sequence 8, Appl1
421	29	55.8	372	1	US-08-196-218-33	Sequence 33, Appl1	494	29	55.8	618	2	US-08-800-929A-8	Sequence 8, Appl1
422	29	55.8	372	1	US-08-681-953-33	Sequence 33, Appl1	495	29	55.8	618	2	US-08-569-749-2	Sequence 2, Appl1
423	29	55.8	379	1	US-09-191-135-32	Sequence 32, Appl1	496	29	55.8	618	2	US-09-617-053A-8	Sequence 8, Appl1
424	29	55.8	381	1	US-09-193-877-2	Sequence 2, Appl1	497	29	55.8	618	2	US-09-069-023-39	Sequence 29, Appl1
425	29	55.8	381	2	US-09-949-016-10057	Sequence 10057, A	498	29	55.8	618	2	US-09-201-926-8	Sequence 8, Appl1
426	29	55.8	383	1	US-09-485-885-23	Sequence 23, Appl1	499	29	55.8	618	2	US-09-011-356-8	Sequence 8, Appl1
427	29	55.8	385	1	US-08-340-539A-2	Sequence 2, Appl1	500	29	55.8	618	2	US-09-672-717-223	Sequence 223, App
428	29	55.8	385	1	US-08-461-592B-2	Sequence 2, Appl1	501	29	55.8	618	2	US-09-201-932-8	Sequence 8, Appl1
429	29	55.8	399	1	US-08-742-621-3	Sequence 3, Appl1	502	29	55.8	618	2	US-09-689-366-2	Sequence 2, Appl1
430	29	55.8	399	1	US-08-742-621-4	Sequence 4, Appl1	503	29	55.8	618	2	US-10-233-286-2	Sequence 2, Appl1
431	29	55.8	399	1	US-08-750-134A-5	Sequence 5, Appl1	504	29	55.8	618	4	PCT-US96-12860-2	Sequence 2, Appl1
432	29	55.8	399	1	US-08-750-134A-11	Sequence 11, Appl1	505	29	55.8	675	1	US-08-386-495-10	Sequence 10, Appl1
433	29	55.8	399	2	US-09-363-745-5	Sequence 5, Appl1	506	29	55.8	675	4	PCT-US96-02331-10	Sequence 10, Appl1
434	29	55.8	399	2	US-09-363-745-11	Sequence 11, Appl1	507	29	55.8	720	2	US-09-252-991A-18618	Sequence 18618, A
435	29	55.8	399	2	US-09-949-016-6236	Sequence 6236, Ap	508	29	55.8	730	1	US-08-420-235B-17	Sequence 17, Appl1
436	29	55.8	402	1	US-08-068-729-4	Sequence 4, Appl1	509	29	55.8	730	2	US-08-793-624-17	Sequence 17, Appl1
437	29	55.8	402	1	US-09-255-671-4	Sequence 4, Appl1	510	29	55.8	730	4	PCT-US95-10194-17	Sequence 17, Appl1
438	29	55.8	402	2	US-09-395-366-4	Sequence 4, Appl1	511	29	55.8	811	2	US-09-248-796A-18641	Sequence 18641, A
439	29	55.8	402	2	US-09-826-509-557	Sequence 557, App	512	29	55.8	842	4	PCT-US96-02331-15	Sequence 15, Appl1
440	29	55.8	412	2	US-09-079-030-124	Sequence 124, App	513	29	55.8	854	2	US-09-949-016-6934	Sequence 6934, Ap
441	29	55.8	412	2	US-09-270-767-43104	Sequence 43104, A	514	29	55.8	923	2	US-09-345-473B-23	Sequence 23, Appl1
442	29	55.8	423	2	US-09-758-759-63	Sequence 63, Appl1	515	29	55.8	923	2	US-09-862-027-53	Sequence 23, Appl1
443	29	55.8	423	2	US-09-910-430-32	Sequence 32, Appl1	516	29	55.8	1006	2	US-09-949-016-8421	Sequence 8421, Ap
444	29	55.8	429	2	US-08-965-762-29	Sequence 29, Appl1	517	29	55.8	1006	2	US-09-949-016-8530	Sequence 8530, Ap
445	29	55.8	429	2	US-09-911-927-29	Sequence 29, Appl1	518	29	55.8	1132	1	US-08-446-038B-18	Sequence 18, Appl1
446	29	55.8	429	2	US-09-911-882-29	Sequence 29, Appl1	519	29	55.8	1132	1	US-08-446-010B-18	Sequence 18, Appl1
447	29	55.8	436	2	US-09-911-888-29	Sequence 29, Appl1	520	29	55.8	1132	1	US-08-805-445-18	Sequence 18, Appl1
448	29	55.8	436	1	US-08-846-762-3	Sequence 3, Appl1	521	29	55.8	1132	1	US-08-064-067D-18	Sequence 18, Appl1
449	29	55.8	436	1	US-08-846-762-72	Sequence 72, Appl1	522	29	55.8	1132	1	US-09-066-208-18	Sequence 18, Appl1
450	29	55.8	438	4	PCT-US95-05922A-2	Sequence 2, Appl1	523	29	55.8	1142	1	US-08-097-997A-11	Sequence 11, Appl1
451	29	55.8	453	2	US-09-949-016-10007	Sequence 10007, A	524	29	55.8	1142	2	US-08-665-574C-11	Sequence 11, Appl1
452	29	55.8	454	2	US-09-252-991A-28653	Sequence 28653, A	525	29	55.8	1142	2	US-08-946-994-11	Sequence 11, Appl1
453	29	55.8	466	2	US-09-134-000C-5176	Sequence 5176, Ap	526	29	55.8	1142	2	US-09-771-611A-211	Sequence 211, App
454	29	55.8	499	2	US-09-902-540-15512	Sequence 15512, A	527	29	55.8	1147	1	US-08-131-365B-38	Sequence 38, Appl1
455	29	55.8	514	2	US-09-949-016-6538	Sequence 6538, Ap	528	29	55.8	1147	1	US-08-668-123-38	Sequence 38, Appl1
456	29	55.8	514	2	US-09-902-540-9755	Sequence 9755, Ap	529	29	55.8	1153	1	US-08-097-997A-14	Sequence 14, Appl1
457	29	55.8	521	2	US-09-949-016-8809	Sequence 8809, Ap	530	29	55.8	1153	2	US-08-665-574C-14	Sequence 14, Appl1
458	29	55.8	529	2	US-09-149-476-732	Sequence 732, App	531	29	55.8	1154	1	US-08-946-994-14	Sequence 14, Appl1
459	29	55.8	531	2	US-09-270-767-44938	Sequence 44938, A	532	29	55.8	1154	1	US-08-357-598-7	Sequence 7, Appl1
460	29	55.8	548	2	US-09-149-476-469	Sequence 469, App	533	29	55.8	1154	1	US-08-446-0108B-24	Sequence 24, Appl1
461	29	55.8	550	2	US-09-538-092-1075	Sequence 1075, Ap	534	29	55.8	1154	1	US-09-003-289-7	Sequence 7, Appl1
462	29	55.8	551	1	US-08-120-960-2	Sequence 2, Appl1	535	29	55.8	1154	4	PCT-US95-16435-7	Sequence 7, Appl1
463	29	55.8	551	2	US-09-347-878-9	Sequence 9, Appl1	536	29	55.8	1164	2	US-09-949-016-8845	Sequence 9845, Ap
464	29	55.8	561	2	US-09-252-991A-16726	Sequence 16726, A	537	29	55.8	1239	1	US-08-937-931-2	Sequence 2, Appl1
465	29	55.8	566	2	US-09-232-468A-14	Sequence 14, Appl1	538	29	55.8	1239	2	US-09-285-502-2	Sequence 2, Appl1

539	29	55.8	1239	2	US-09-709-126-2	Sequence 2, Appli	612	28	53.8	225	2	US-09-513-999C-6037	Sequence 6037, Ap
540	29	53.8	1239	2	US-09-871-385A-2	Sequence 2, Appli	613	28	53.8	228	2	US-09-489-039A-7761	Sequence 7761, Ap
541	29	55.8	1288	1	US-08-962-284-2	Sequence 2, Appli	614	28	53.8	233	2	US-09-270-767-77013	Sequence 77013, A
542	29	55.8	1792	1	US-08-962-284-4	Sequence 4, Appli	615	28	53.8	233	2	US-09-270-767-52230	Sequence 52230, A
543	28.5	54.8	302	2	US-09-657-013-49	Sequence 49, Appli	616	28	53.8	236	2	US-08-311-731A-177	Sequence 177, App
544	28.5	54.8	302	2	US-09-949-016-6893	Sequence 6893, Ap	617	28	53.8	243	2	US-09-248-796A-15510	Sequence 15510, A
545	28	53.8	41	1	US-08-726-306A-83	Sequence 83, Appli	618	28	53.8	246	2	US-09-270-767-39888	Sequence 39888, A
546	28	53.8	42	1	US-08-751-305-9	Sequence 83, Appli	619	28	53.8	246	2	US-09-270-767-55105	Sequence 55105, A
547	28	53.8	49	1	US-09-800-729-105	Sequence 105, App	620	28	53.8	260	2	US-09-489-039A-13882	Sequence 13882, A
548	28	53.8	50	2	US-08-975-080-30	Sequence 30, Appli	621	28	53.8	262	2	US-09-976-594-137	Sequence 347, App
549	28	53.8	50	2	US-09-919-039-50	Sequence 50, Appli	622	28	53.8	266	2	US-09-579-664B-13	Sequence 13, Appli
550	28	53.8	50	2	US-10-138-618-30	Sequence 30, Appli	623	28	53.8	266	2	US-10-355-975A-13	Sequence 13, Appli
551	28	53.8	50	2	US-09-690-825-30	Sequence 30, Appli	624	28	53.8	268	2	US-09-489-039A-14122	Sequence 14122, A
552	28	53.8	55	2	US-09-489-847-180	Sequence 180, App	625	28	53.8	270	2	US-10-104-047-3274	Sequence 3274, Ap
553	28	53.8	56	2	US-09-673-395A-469	Sequence 469, App	626	28	53.8	271	2	US-09-107-552A-3966	Sequence 3966, Ap
554	28	53.8	60	2	US-09-800-729-197	Sequence 197, App	627	28	53.8	272	2	US-09-328-352-7434	Sequence 7434, Ap
555	28	53.8	69	2	US-09-471-276-1263	Sequence 1263, Ap	628	28	53.8	275	2	US-09-579-664B-8	Sequence 8, Appli
556	28	53.8	84	2	US-09-690-454-167	Sequence 167, App	629	28	53.8	286	2	US-09-270-767-44940	Sequence 44940, A
557	28	53.8	84	2	US-09-107-433-2881	Sequence 2881, Ap	630	28	53.8	286	2	US-10-355-975A-8	Sequence 8, Appli
558	28	53.8	86	2	US-09-134-001C-3319	Sequence 3319, Ap	631	28	53.8	289	2	US-09-252-991A-32560	Sequence 32560, A
559	28	53.8	86	2	US-09-270-767-59656	Sequence 59656, A	632	28	53.8	294	2	US-09-270-767-58266	Sequence 58266, A
560	28	53.8	87	2	US-09-270-767-35002	Sequence 35002, A	633	28	53.8	296	2	US-09-270-767-45850	Sequence 45850, A
561	28	53.8	87	2	US-09-270-767-50219	Sequence 50219, A	634	28	53.8	299	2	US-09-489-039A-13151	Sequence 13151, A
562	28	53.8	89	2	US-09-248-796A-24611	Sequence 24611, A	635	28	53.8	299	2	US-09-270-767-37559	Sequence 37559, A
563	28	53.8	91	2	US-09-248-796A-24821	Sequence 24821, A	636	28	53.8	301	2	US-09-543-681A-8264	Sequence 8264, Ap
564	28	53.8	106	2	US-09-540-236-2095	Sequence 2095, Ap	637	28	53.8	301	2	US-09-270-767-43978	Sequence 43978, A
565	28	53.8	106	2	US-09-270-767-62424	Sequence 62424, A	638	28	53.8	303	2	US-09-916-338A-2	Sequence 2, Appli
566	28	53.8	107	2	US-09-583-110-5245	Sequence 5245, Ap	639	28	53.8	303	2	US-09-248-796A-16719	Sequence 16719, A
567	28	53.8	108	2	US-09-107-433-4521	Sequence 4521, Ap	640	28	53.8	309	2	US-09-270-767-65802	Sequence 65802, A
568	28	53.8	111	2	US-09-270-767-33608	Sequence 33608, A	641	28	53.8	310	1	US-08-943-600A-1	Sequence 1, Appli
569	28	53.8	111	2	US-09-270-767-34432	Sequence 34432, A	642	28	53.8	310	2	US-09-902-560A-1	Sequence 11430, A
570	28	53.8	111	2	US-09-270-767-48825	Sequence 48825, A	643	28	53.8	311	2	US-09-902-560A-11430	Sequence 37, Appli
571	28	53.8	111	2	US-09-270-767-48825	Sequence 48825, A	644	28	53.8	312	2	US-10-355-975A-37	Sequence 22977, A
572	28	53.8	113	2	US-09-809-545A-72	Sequence 49649, A	645	28	53.8	314	2	US-09-248-796A-22297	Sequence 6, Appli
573	28	53.8	117	2	US-09-902-540-10282	Sequence 10282, A	646	28	53.8	315	2	US-09-949-016-7493	Sequence 7493, Ap
574	28	53.8	122	2	US-09-552-976-24285	Sequence 24285, A	647	28	53.8	328	1	US-08-386-727-6	Sequence 6, Appli
575	28	53.8	125	2	US-09-621-976-5446	Sequence 5446, Ap	648	28	53.8	328	1	US-08-600-452A-6	Sequence 15060, A
576	28	53.8	125	2	US-09-605-703B-2022	Sequence 2022, Ap	649	28	53.8	334	1	US-09-902-560-15060	Sequence 2, Appli
577	28	53.8	129	2	US-09-583-110-3242	Sequence 3242, Ap	650	28	53.8	342	1	US-08-742-011-2	Sequence 5, Appli
578	28	53.8	129	2	US-09-270-767-35797	Sequence 35797, A	651	28	53.8	342	2	US-09-275-384B-5	Sequence 2, Appli
579	28	53.8	129	2	US-09-270-767-51014	Sequence 51014, A	652	28	53.8	342	2	US-09-116-498-2	Sequence 4, Appli
580	28	53.8	129	2	US-09-107-433-3947	Sequence 3947, Ap	653	28	53.8	342	2	US-09-116-498-6	Sequence 6, Appli
581	28	53.8	129	2	US-09-769-787-137	Sequence 137, App	654	28	53.8	342	2	US-09-116-498-6	Sequence 9, Appli
582	28	53.8	132	2	US-09-125-642C-15	Sequence 15, App	655	28	53.8	342	2	US-09-449-437A-2	Sequence 2, Appli
583	28	53.8	133	2	US-09-431-888-2	Sequence 15, Appli	656	28	53.8	342	2	US-09-517-605-9	Sequence 9, Appli
584	28	53.8	134	2	US-09-270-767-38779	Sequence 38779, A	657	28	53.8	342	2	US-09-852-156-2	Sequence 2, Appli
585	28	53.8	134	2	US-09-270-767-53966	Sequence 53966, A	658	28	53.8	342	2	US-09-852-156-4	Sequence 4, Appli
586	28	53.8	137	2	US-09-270-767-59385	Sequence 59385, A	659	28	53.8	342	2	US-09-852-156-6	Sequence 6, Appli
587	28	53.8	141	2	US-09-583-110-2819	Sequence 2819, Ap	660	28	53.8	342	2	US-09-852-156-6	Sequence 9, Appli
588	28	53.8	141	2	US-09-107-433-4958	Sequence 4958, Ap	661	28	53.8	342	2	US-09-721-341-9	Sequence 9, Appli
589	28	53.8	144	2	US-09-489-039A-8229	Sequence 8229, Ap	662	28	53.8	342	2	US-09-721-341-9	Sequence 28, Appli
590	28	53.8	153	2	US-10-104-047-2778	Sequence 2778, Ap	663	28	53.8	342	2	US-09-655-908-28	Sequence 28, Appli
591	28	53.8	157	2	US-09-489-039A-9026	Sequence 9026, Ap	664	28	53.8	351	1	US-08-197-792-39	Sequence 39, Appli
592	28	53.8	157	2	US-09-489-039A-9364	Sequence 9364, Ap	665	28	53.8	351	1	US-08-459-850-39	Sequence 39, Appli
593	28	53.8	158	2	US-09-248-796A-18178	Sequence 18178, A	666	28	53.8	351	1	US-08-459-850-39	Sequence 39, Appli
594	28	53.8	159	1	US-08-197-792-14	Sequence 14, Appli	667	28	53.8	352	1	US-08-483-926A-11	Sequence 11, Appli
595	28	53.8	159	1	US-08-459-850-14	Sequence 14, Appli	668	28	53.8	352	1	US-08-737-045-12	Sequence 12, Appli
596	28	53.8	159	1	US-08-459-850-14	Sequence 14, Appli	669	28	53.8	353	2	US-09-895-593-3	Sequence 3, Appli
597	28	53.8	159	1	US-08-459-850-14	Sequence 14, Appli	670	28	53.8	359	2	US-09-248-796A-18054	Sequence 18054, A
598	28	53.8	162	2	US-09-661-711A-27	Sequence 27, Appli	671	28	53.8	363	1	US-09-068-109-2	Sequence 29, Appli
599	28	53.8	176	2	US-09-248-796A-14788	Sequence 14788, A	672	28	53.8	364	1	US-09-068-109-2	Sequence 29, Appli
600	28	53.8	179	2	US-09-252-991A-21594	Sequence 21594, A	673	28	53.8	364	1	US-08-459-850-29	Sequence 29, Appli
601	28	53.8	180	2	US-09-134-000C-3425	Sequence 3425, Ap	674	28	53.8	364	1	US-08-459-850-29	Sequence 29, Appli
602	28	53.8	184	2	US-09-489-039A-12419	Sequence 12419, A	675	28	53.8	364	1	US-09-248-796A-18444	Sequence 18444, A
603	28	53.8	184	2	US-09-270-767-44233	Sequence 44233, A	676	28	53.8	367	2	US-09-949-016-11134	Sequence 11134, A
604	28	53.8	189	2	US-09-949-016-7562	Sequence 7562, Ap	677	28	53.8	370	2	US-09-895-593-2	Sequence 2, Appli
605	28	53.8	191	2	US-09-950-933A-66	Sequence 66, Appli	678	28	53.8	371	2	US-09-949-016-6816	Sequence 6816, Ap
606	28	53.8	192	2	US-09-134-000C-5752	Sequence 5752, Appli	679	28	53.8	380	2	US-08-360-107A-125	Sequence 125, App
607	28	53.8	194	2	US-09-252-991A-24154	Sequence 24154, A	680	28	53.8	380	2	US-09-165-522-16	Sequence 16, Appli
608	28	53.8	196	2	US-09-270-767-46722	Sequence 46722, A	681	28	53.8	385	2	US-09-248-796A-18692	Sequence 18692, A
609	28	53.8	201	2	US-09-270-767-61767	Sequence 61767, A	682	28	53.8	385	2	US-09-540-236-31453	Sequence 31453, Ap
610	28	53.8	201	2	US-09-270-767-45415	Sequence 45415, A	683	28	53.8	389	2	US-09-758-759-9	Sequence 9, Appli
611	28	53.8	219	2	US-09-469-039A-9000	Sequence 9000, Ap	684	28	53.8	390	2	US-09-949-016-8580	Sequence 8580, Ap
					US-09-248-796A-16897	Sequence 16897, A							

685	28	53.8	390	2	US-10-104-047-2682	Sequence 2682, Ap	758	28	53.8	604	2	US-09-201-932-6	Sequence 6, Appli
686	28	53.8	395	1	US-07-931-943-2	Sequence 5, Appli	759	28	53.8	604	2	US-09-949-016-6031	Sequence 6031, Ap
687	28	53.8	395	1	US-07-931-943-5	Sequence 5, Appli	760	28	53.8	604	2	US-09-688-366-4	Sequence 4, Appli
688	28	53.8	395	1	US-08-624-601-15	Sequence 15, Appli	761	28	53.8	604	2	US-10-232-286-4	Sequence 4, Appli
689	28	53.8	413	2	US-09-902-540-9834	Sequence 9834, Ap	762	28	53.8	604	4	PCT-US96-12860-4	Sequence 4, Appli
690	28	53.8	431	2	US-09-248-796A-16312	Sequence 16312, A	763	28	53.8	611	1	US-08-677-049-2	Sequence 2, Appli
691	28	53.8	434	2	US-09-252-991A-24980	Sequence 24980, A	764	28	53.8	612	2	US-09-252-991A-19134	Sequence 19134, A
692	28	53.8	434	2	US-09-543-681A-7780	Sequence 7780, Ap	765	28	53.8	613	2	US-09-949-016-10878	Sequence 10878, A
693	28	53.8	442	2	US-09-579-692B-58	Sequence 58, Appl	766	28	53.8	619	2	US-09-248-786A-15653	Sequence 15653, A
694	28	53.8	443	2	US-09-610-906-1	Sequence 1, Appli	767	28	53.8	622	2	US-09-957-944-10	Sequence 10, Appli
695	28	53.8	450	2	US-09-270-767-42943	Sequence 42943, A	768	28	53.8	652	1	US-08-751-305-2	Sequence 2, Appli
696	28	53.8	455	2	US-10-104-047-2644	Sequence 2644, Ap	769	28	53.8	671	2	US-09-248-796A-19563	Sequence 19563, A
697	28	53.8	456	2	US-09-270-767-46204	Sequence 46204, A	770	28	53.8	701	2	US-09-252-991A-27999	Sequence 27999, A
698	28	53.8	459	2	US-09-160-494-4	Sequence 4, Appli	771	28	53.8	729	2	US-09-248-786A-17702	Sequence 17702, A
699	28	53.8	460	2	US-10-104-047-2784	Sequence 2784, Ap	772	28	53.8	756	2	US-09-949-016-10455	Sequence 10455, A
700	28	53.8	471	2	US-09-071-709-4	Sequence 4, Appli	773	28	53.8	761	2	US-10-781-559-63	Sequence 63, Appli
701	28	53.8	471	2	US-09-160-494-2	Sequence 2, Appli	774	28	53.8	773	2	US-09-944-016-10285	Sequence 10285, A
702	28	53.8	471	2	US-09-160-494-6	Sequence 6, Appli	775	28	53.8	774	2	US-09-276-400-7	Sequence 7, Appli
703	28	53.8	471	2	US-09-713-669-4	Sequence 4, Appli	776	28	53.8	774	2	US-09-448-076-7	Sequence 7, Appli
704	28	53.8	478	1	US-09-040-799-3	Sequence 3, Appli	777	28	53.8	777	2	US-09-702-572-7	Sequence 7, Appli
705	28	53.8	478	1	US-09-093-448-1	Sequence 1, Appli	778	28	53.8	780	2	US-09-949-016-6372	Sequence 6372, Ap
706	28	53.8	478	2	US-09-093-448-2	Sequence 2, Appli	779	28	53.8	786	2	US-09-103-429A-3	Sequence 3, Appli
707	28	53.8	478	2	US-09-093-448-3	Sequence 3, Appli	780	28	53.8	788	2	US-09-294-663-3	Sequence 3, Appli
708	28	53.8	478	2	US-09-813-555-1	Sequence 1, Appli	781	28	53.8	805	2	US-09-103-429A-4	Sequence 4, Appli
709	28	53.8	478	2	US-09-813-555-2	Sequence 2, Appli	782	28	53.8	807	2	US-09-294-663-4	Sequence 4, Appli
710	28	53.8	478	2	US-09-813-555-3	Sequence 3, Appli	783	28	53.8	816	2	US-10-101-464A-827	Sequence 827, App
711	28	53.8	478	2	US-09-523-263B-4	Sequence 4, Appli	784	28	53.8	861	2	US-09-826-312A-10	Sequence 10, Appli
712	28	53.8	478	2	US-09-523-263B-16	Sequence 16, Appli	785	28	53.8	861	2	US-09-542-477A-10	Sequence 10, Appli
713	28	53.8	478	2	US-09-523-263B-17	Sequence 17, Appli	786	28	53.8	864	2	US-10-108-767-10	Sequence 10, Appli
714	28	53.8	478	2	US-10-299-867-4	Sequence 4, Appli	787	28	53.8	884	2	US-09-538-092-172	Sequence 172, App
715	28	53.8	478	2	US-10-299-867-16	Sequence 16, Appli	788	28	53.8	911	2	US-09-074-579-4	Sequence 4, Appli
716	28	53.8	478	2	US-10-299-867-17	Sequence 17, Appli	789	28	53.8	944	2	US-09-388-774-4	Sequence 4, Appli
717	28	53.8	489	1	US-08-663-566A-6	Sequence 6, Appli	790	28	53.8	944	2	US-09-270-767-68843	Sequence 46843, A
718	28	53.8	489	1	US-08-023-610-6	Sequence 6, Appli	791	28	53.8	1033	2	US-10-022-347-4	Sequence 4, Appli
719	28	53.8	489	1	US-08-288-065A-6	Sequence 6, Appli	792	28	53.8	1077	2	US-10-104-047-4291	Sequence 2291, Ap
720	28	53.8	489	1	US-08-362-240A-6	Sequence 6, Appli	793	28	53.8	1083	2	US-09-843-159B-10	Sequence 10, Appli
721	28	53.8	489	2	US-08-804-372A-4	Sequence 4, Appli	794	28	53.8	1100	2	US-09-427-154-2	Sequence 2, Appli
722	28	53.8	489	4	PCT-US95-10245-6	Sequence 6, Appli	795	28	53.8	1100	2	US-09-696-668-3	Sequence 3, Appli
723	28	53.8	502	2	US-09-635-872A-13	Sequence 13, Appli	796	28	53.8	1100	2	US-09-843-159B-3	Sequence 3, Appli
724	28	53.8	502	2	US-09-636-077A-13	Sequence 13, Appli	797	28	53.8	1100	2	US-09-843-159B-9	Sequence 9, Appli
725	28	53.8	502	2	US-09-636-060C-13	Sequence 13, Appli	798	28	53.8	1109	2	US-09-688-188B-8	Sequence 88, Appli
726	28	53.8	502	2	US-09-986-552-13	Sequence 13, Appli	799	28	53.8	1109	2	US-09-291-417D-8	Sequence 88, Appli
727	28	53.8	502	2	US-09-636-596C-13	Sequence 13, Appli	800	28	53.8	1140	2	US-09-579-692B-8	Sequence 8, Appli
728	28	53.8	502	2	US-10-023-894-16	Sequence 16, Appli	801	28	53.8	1166	2	US-09-350-982C-5	Sequence 5, Appli
729	28	53.8	502	2	US-10-306-686-13	Sequence 13, Appli	802	28	53.8	1166	2	US-09-972-115A-6	Sequence 6, Appli
730	28	53.8	502	2	US-09-895-072-13	Sequence 13, Appli	803	28	53.8	1175	2	US-09-771-161A-224	Sequence 224, App
731	28	53.8	502	2	US-10-023-888-16	Sequence 16, Appl	804	28	53.8	1175	2	US-09-771-161A-225	Sequence 225, App
732	28	53.8	507	2	US-09-252-991A-23432	Sequence 23432, A	805	28	53.8	1175	2	US-09-771-161A-226	Sequence 226, App
733	28	53.8	509	2	US-09-949-016-5887	Sequence 5887, Ap	806	28	53.8	1227	2	US-09-849-602-26	Sequence 26, Appl
734	28	53.8	520	2	US-09-949-016-11495	Sequence 11495, A	807	28	53.8	1233	2	US-09-645-456A-35	Sequence 35, Appli
735	28	53.8	531	2	US-09-661-711A-16	Sequence 16, Appli	808	28	53.8	1233	2	US-09-425-324A-35	Sequence 35, Appli
736	28	53.8	551	2	US-09-661-711A-2	Sequence 2, Appli	809	28	53.8	1233	2	US-09-645-791-35	Sequence 35, Appli
737	28	53.8	551	2	US-09-661-711A-12	Sequence 12, Appli	810	28	53.8	1233	2	US-09-688-188B-8	Sequence 89, Appli
738	28	53.8	552	2	US-09-661-711A-10	Sequence 10, Appli	811	28	53.8	1233	2	US-09-291-417D-8	Sequence 89, Appli
739	28	53.8	552	2	US-09-270-767-42435	Sequence 42435, A	812	28	53.8	1234	2	US-09-489-039A-8741	Sequence 8741, Ap
740	28	53.8	564	2	US-09-380-287A-28	Sequence 28, Appl	813	28	53.8	1239	2	US-09-688-188B-13	Sequence 13, Appli
741	28	53.8	574	2	US-10-023-515-4	Sequence 4, Appli	814	28	53.8	1240	2	US-09-291-417D-13	Sequence 13, Appli
742	28	53.8	576	2	US-09-578-921A-2	Sequence 2, Appli	815	28	53.8	1240	2	US-09-696-668-4	Sequence 4, Appli
743	28	53.8	583	2	US-09-270-767-43661	Sequence 43661, A	816	28	53.8	1240	2	US-10-101-464A-976	Sequence 976, App
744	28	53.8	583	2	US-09-843-159B-8	Sequence 8, Appli	817	28	53.8	1240	2	US-09-843-159B-4	Sequence 4, Appli
745	28	53.8	594	2	US-09-380-287A-8	Sequence 8, Appli	818	28	53.8	1260	2	US-09-972-115A-4	Sequence 4, Appli
746	28	53.8	594	2	US-09-380-287A-10	Sequence 10, Appli	819	28	53.8	1269	2	US-09-645-456A-15	Sequence 15, Appli
747	28	53.8	597	2	US-08-844-274-12	Sequence 12, Appli	820	28	53.8	1269	2	US-09-645-456A-15	Sequence 15, Appli
748	28	53.8	597	2	US-09-598-421-12	Sequence 12, Appli	821	28	53.8	1269	2	US-09-425-324A-15	Sequence 15, Appli
749	28	53.8	598	2	US-09-949-016-6555	Sequence 6555, Ap	822	28	53.8	1277	2	US-09-645-791-15	Sequence 15, Appli
750	28	53.8	604	1	US-08-511-485-6	Sequence 6, Appli	823	28	53.8	1277	2	US-09-645-456A-12	Sequence 12, Appli
751	28	53.8	604	2	US-09-212-971-6	Sequence 6, Appli	824	28	53.8	1277	2	US-09-425-324A-12	Sequence 12, Appli
752	28	53.8	604	2	US-08-800-929A-6	Sequence 6, Appli	825	28	53.8	1297	2	US-09-688-188B-14	Sequence 14, Appli
753	28	53.8	604	2	US-08-869-749-4	Sequence 4, Appli	826	28	53.8	1297	2	US-09-291-417D-14	Sequence 14, Appli
754	28	53.8	604	2	US-09-617-053A-6	Sequence 6, Appli	827	28	53.8	1298	2	US-09-645-456A-14	Sequence 14, Appli
755	28	53.8	604	2	US-09-201-936-6	Sequence 6, Appli	828	28	53.8	1298	2	US-09-425-324A-14	Sequence 14, Appli
756	28	53.8	604	2	US-09-011-356-6	Sequence 6, Appli	829	28	53.8	1298	2	US-09-645-791-14	Sequence 14, Appli
757	28	53.8	604	2	US-09-672-717-221	Sequence 221, App	830	28	53.8	1306	2	US-09-645-456A-10	Sequence 10, Appli

8311	28	53.8	1306	2	US-09-425-324A-10	Sequence 10, Appl	904	27	51.9	68	2	US-09-270-767-60808	Sequence 60808, A
832	28	53.8	1306	2	US-09-645-791-10	Sequence 10, Appl	905	27	51.9	71	2	US-09-543-681A-6962	Sequence 6962, Ap
833	28	53.8	1324	2	US-09-645-456A-13	Sequence 13, Appl	906	27	51.9	71	2	US-09-248-796A-25557	Sequence 25557, A
834	28	53.8	1324	2	US-09-425-324A-13	Sequence 13, Appl	907	27	51.9	72	2	US-09-248-796A-22399	Sequence 22399, A
835	28	53.8	1324	2	US-09-645-791-13	Sequence 13, Appl	908	27	51.9	73	2	US-09-206-551-91	Sequence 31, Appl
836	28	53.8	1326	2	US-09-688-188B-15	Sequence 15, Appl	909	27	51.9	76	2	US-09-248-796A-27247	Sequence 27247, A
837	28	53.8	1326	2	US-09-291-417D-15	Sequence 15, Appl	910	27	51.9	79	1	US-08-221-285-33	Sequence 33, Appl
838	28	53.8	1332	2	US-09-645-456A-9	Sequence 9, Appl	911	27	51.9	79	2	US-08-428-596A-33	Sequence 33, Appl
839	28	53.8	1332	2	US-09-425-324A-9	Sequence 9, Appl	912	27	51.9	79	2	US-09-513-681A-5949	Sequence 5949, Ap
840	28	53.8	1332	2	US-09-645-791-9	Sequence 9, Appl	913	27	51.9	80	2	US-09-636-215-556	Sequence 5562, Ap
841	28	53.8	1333	2	US-09-972-115A-2	Sequence 2, Appl	914	27	51.9	81	2	US-09-685-166A-556	Sequence 556, App
842	28	53.8	1353	2	US-09-645-456A-11	Sequence 11, Appl	915	27	51.9	81	2	US-09-679-426-556	Sequence 556, App
843	28	53.8	1353	2	US-09-425-324A-11	Sequence 11, Appl	916	27	51.9	81	2	US-09-759-136-556	Sequence 556, App
844	28	53.8	1353	2	US-09-645-791-11	Sequence 11, Appl	917	27	51.9	81	2	US-09-651-236-556	Sequence 556, App
845	28	53.8	1360	2	US-09-393-569-2	Sequence 2, Appl	918	27	51.9	81	2	US-09-657-279-556	Sequence 556, App
846	28	53.8	1360	2	US-09-579-664B-14	Sequence 14, Appl	919	27	51.9	81	2	US-10-012-886-556	Sequence 556, App
847	28	53.8	1360	2	US-09-645-456A-34	Sequence 34, Appl	920	27	51.9	81	2	US-09-489-039A-13253	Sequence 13253, A
848	28	53.8	1360	2	US-09-425-324A-34	Sequence 34, Appl	921	27	51.9	88	2	US-09-673-395A-171	Sequence 171, App
849	28	53.8	1360	2	US-09-645-791-34	Sequence 34, Appl	922	27	51.9	89	2	US-09-248-796A-25397	Sequence 25397, A
850	28	53.8	1360	2	US-10-355-975A-14	Sequence 14, Appl	923	27	51.9	97	2	US-09-513-999C-4915	Sequence 4915, Ap
851	28	53.8	1360	2	US-09-270-767-45587	Sequence 45587, A	924	27	51.9	103	2	US-09-868-659-39	Sequence 39, Appl
852	28	53.8	1765	2	US-09-270-767-45587	Sequence 45587, A	925	27	51.9	104	2	US-09-868-143-59	Sequence 99, Appl
853	28	53.8	2214	1	US-08-727-034-3	Sequence 3, Appl	926	27	51.9	105	2	US-09-288-143-59	Sequence 336, App
854	28	53.8	2214	1	US-08-727-034-7	Sequence 7, Appl	927	27	51.9	105	2	US-09-205-258-330	Sequence 330, App
855	28	53.8	2214	1	US-09-919-039-40	Sequence 40, Appl	928	27	51.9	105	2	US-08-691-794-3	Sequence 3, Appl
856	28	53.8	2262	2	US-09-949-016-8849	Sequence 8849, Ap	929	27	51.9	109	2	US-08-663-600A-123	Sequence 123, App
857	28	53.8	2375	2	US-09-538-092-1131	Sequence 1131, Ap	930	27	51.9	109	2	US-09-902-540-15421	Sequence 15421, A
858	28	53.8	2476	2	US-09-824-574-7	Sequence 7, Appl	931	27	51.9	109	2	US-09-392-932-11	Sequence 11, Appl
859	28	53.8	2539	2	US-09-413-814-42	Sequence 42, Appl	932	27	51.9	110	2	US-09-574-708A-11	Sequence 17, Appl
860	28	53.8	2713	4	PCT-US96-01735-1	Sequence 1, Appl	933	27	51.9	110	2	US-09-822-270-17	Sequence 10, Appl
861	28	53.8	2749	2	US-09-385-222A-4	Sequence 4, Appl	934	27	51.9	110	2	US-09-392-931-11	Sequence 11, Appl
862	27.5	52.9	63	2	US-09-270-767-61078	Sequence 61078, A	935	27	51.9	110	2	US-09-392-931-11	Sequence 11, Appl
863	27.5	52.9	178	2	US-09-270-767-60433	Sequence 60433, A	936	27	51.9	110	2	US-09-392-931-11	Sequence 11, Appl
864	27.5	52.9	206	2	US-09-270-767-62416	Sequence 62416, A	937	27	51.9	110	2	US-09-392-931-11	Sequence 11, Appl
865	27.5	52.9	300	2	US-09-252-991A-29743	Sequence 29743, A	938	27	51.9	111	1	US-08-663-566A-49	Sequence 49, Appl
866	27.5	52.9	310	2	US-09-305-856B-14	Sequence 14, Appl	939	27	51.9	111	1	US-08-288-065A-49	Sequence 49, Appl
867	27.5	52.9	572	2	US-08-111-731A-32	Sequence 32, Appl	940	27	51.9	111	1	US-08-362-240A-49	Sequence 49, Appl
868	27.5	52.9	683	2	US-09-270-767-46792	Sequence 46792, A	941	27	51.9	111	2	US-08-804-372A-13	Sequence 13, Appl
869	27.5	52.9	4019	2	US-09-854-133-425	Sequence 425, App	942	27	51.9	111	2	PCT-US95-10245-49	Sequence 49, Appl
870	27	51.9	7	2	US-09-139-802-5	Sequence 5, Appl	943	27	51.9	112	4	US-08-469-260A-71	Sequence 71, Appl
871	27	51.9	7	2	US-09-659-786-5	Sequence 5, Appl	944	27	51.9	112	2	US-08-469-260A-71	Sequence 71, Appl
872	27	51.9	7	2	US-08-326-914-5	Sequence 5, Appl	945	27	51.9	112	2	US-08-467-344A-71	Sequence 71, Appl
873	27	51.9	7	2	US-09-428-082B-1077	Sequence 1077, Ap	946	27	51.9	112	2	US-08-424-550B-71	Sequence 71, Appl
874	27	51.9	12	2	US-08-742-243-35	Sequence 35, Appl	947	27	51.9	113	2	US-09-270-767-45306	Sequence 45306, A
875	27	51.9	12	2	US-08-742-243-36	Sequence 36, Appl	948	27	51.9	114	2	US-09-640-211A-937	Sequence 937, App
876	27	51.9	12	2	US-09-419-826-24	Sequence 24, Appl	949	27	51.9	114	2	US-09-640-211A-937	Sequence 937, App
877	27	51.9	17	2	US-08-807-992B-23	Sequence 23, Appl	950	27	51.9	115	2	US-09-621-976-5517	Sequence 5517, Ap
878	27	51.9	20	2	US-08-602-999A-110	Sequence 110, App	951	27	51.9	120	6	US-09-134-000C-4336	Sequence 4336, Ap
879	27	51.9	20	2	US-09-500-124-110	Sequence 110, App	952	27	51.9	120	6	5194596-9	Patent No. 5194596
880	27	51.9	25	2	US-09-471-276-1037	Sequence 1037, Ap	953	27	51.9	120	6	5219739-9	Patent No. 5219739
881	27	51.9	30	2	US-09-774-639-317	Sequence 317, App	954	27	51.9	121	2	US-09-248-796A-15938	Sequence 15938, A
882	27	51.9	43	2	US-09-962-756-1441	Sequence 1441, Ap	955	27	51.9	121	6	5194596-19	Patent No. 5194596
883	27	51.9	46	1	US-08-221-285-6	Sequence 6, Appl	956	27	51.9	121	6	5219739-20	Patent No. 5219739
884	27	51.9	46	1	US-08-221-285-7	Sequence 7, Appl	957	27	51.9	124	6	US-09-583-110-3302	Sequence 3302, Ap
885	27	51.9	46	1	US-08-221-285-10	Sequence 10, Appl	958	27	51.9	125	2	US-09-270-767-35736	Sequence 35736, A
886	27	51.9	46	2	US-08-428-596A-6	Sequence 6, Appl	959	27	51.9	125	2	US-09-270-767-5953	Sequence 5953, A
887	27	51.9	46	2	US-08-428-596A-7	Sequence 7, Appl	960	27	51.9	126	2	US-09-898-658-37	Sequence 37, Appl
888	27	51.9	46	2	US-08-428-596A-10	Sequence 10, Appl	961	27	51.9	132	2	US-09-621-976-4796	Sequence 47, App
889	27	51.9	49	2	US-09-052-089A-16	Sequence 16, Appl	962	27	51.9	136	2	US-09-037-983C-15	Sequence 15, Appl
890	27	51.9	49	2	US-09-673-395A-376	Sequence 376, App	963	27	51.9	137	2	US-09-037-983C-17	Sequence 17, Appl
891	27	51.9	49	2	US-09-716-536-16	Sequence 16, Appl	964	27	51.9	138	2	US-09-107-532A-6953	Sequence 6953, Ap
892	27	51.9	52	2	US-09-959-897-10	Sequence 10, Appl	965	27	51.9	138	2	US-09-037-983C-16	Sequence 16, Appl
893	27	51.9	52	2	US-09-640-211A-851	Sequence 18, Appl	966	27	51.9	140	2	US-09-270-767-31947	Sequence 31947, A
894	27	51.9	57	2	US-09-270-767-36248	Sequence 851, App	967	27	51.9	140	2	US-09-270-767-41764	Sequence 41764, A
895	27	51.9	57	2	US-09-270-767-51465	Sequence 36248, A	968	27	51.9	141	2	US-09-519-476-2	Sequence 4762, A
896	27	51.9	57	2	US-09-248-796A-25411	Sequence 51465, A	969	27	51.9	141	2	US-09-107-532A-4819	Sequence 4819, Ap
897	27	51.9	60	1	US-08-221-285-35	Sequence 25411, A	970	27	51.9	141	2	US-09-884-050-2	Sequence 2, Appl
898	27	51.9	61	1	US-08-428-596A-35	Sequence 35, Appl	971	27	51.9	145	2	US-08-784-551C-2	Sequence 2, Appl
899	27	51.9	62	2	US-09-902-540-14296	Sequence 35, Appl	972	27	51.9	145	2	US-09-392-932-2	Sequence 2, Appl
900	27	51.9	64	2	US-09-248-796A-23109	Sequence 14296, A	973	27	51.9	145	2	US-09-574-708A-4	Sequence 4, Appl
901	27	51.9	65	2	US-09-244-583-12	Sequence 23109, A	974	27	51.9	145	2	US-09-037-983C-2	Sequence 2, Appl
902	27	51.9	66	2	US-09-543-681A-6661	Sequence 12, Appl	975	27	51.9	145	2	US-09-428-909A-2	Sequence 2, Appl
903	27	51.9	67	2	US-09-513-999C-6917	Sequence 6661, Ap	976	27	51.9	145	2	US-09-392-931-4	Sequence 4, Appl

977 27 51.9 145 2 US-10-268-447-4 Sequence 4, Appl
978 27 51.9 146 2 US-08-586-039B-33 Sequence 33, Appl
979 27 51.9 146 2 US-09-699-769-33 Sequence 33, Appl
980 27 51.9 147 2 US-08-807-992B-1 Sequence 1, Appl
981 27 51.9 147 2 US-09-392-932-1 Sequence 1, Appl
982 27 51.9 147 2 US-08-706-054A-4 Sequence 4, Appl
983 27 51.9 147 2 US-09-574-708A-2 Sequence 2, Appl
984 27 51.9 147 2 US-09-431-888-3 Sequence 3, Appl
985 27 51.9 147 2 US-09-313-299-4 Sequence 4, Appl
986 27 51.9 147 2 US-09-532-310B-1 Sequence 1, Appl
987 27 51.9 147 2 US-09-533-029-16 Sequence 16, Appl
988 27 51.9 147 2 US-09-392-931-2 Sequence 2, Appl
989 27 51.9 147 2 US-10-268-447-2 Sequence 2, Appl
990 27 51.9 149 2 US-09-252-991A-21599 Sequence 21599, A
991 27 51.9 152 2 US-09-621-976-5880 Sequence 5880, Ap
992 27 51.9 152 2 US-09-252-991A-30905 Sequence 30905, A
993 27 51.9 157 2 US-09-543-681A-4437 Sequence 4437, Ap
994 27 51.9 157 2 US-09-248-796A-23444 Sequence 23444, A
995 27 51.9 162 1 US-07-961-702-2 Sequence 2, Appl
996 27 51.9 162 1 US-08-472-284-2 Sequence 2, Appl
997 27 51.9 162 1 US-08-476-678-2 Sequence 2, Appl
998 27 51.9 162 1 US-08-472-418-2 Sequence 2, Appl
999 27 51.9 164 2 US-09-244-583-24 Sequence 24, Appl
1000 27 51.9 164 6 5194596-17 Patent No. 5194596

ALIGNMENTS

RESULT 1
US-08-934-915-45
Sequence 45, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOSSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. FOLCH
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 45:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-45

Query Match 100.0%; Score 52; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0065;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 11 PLCDLLIRC 19

RESULT 2
US-09-701-080C-18
Sequence 18, Application US/09701080C
Patent No. 6864054
GENERAL INFORMATION:
APPLICANT: INSTITUTE OF MOLECULAR AND CELL BIOLOGY
TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING PROTEIN AND RELATED PROTEIN P300 F
FILE REFERENCE: N73477C GCM
CURRENT APPLICATION NUMBER: US/09/701,080C
CURRENT FILING DATE: 2001-02-27
PRIOR APPLICATION NUMBER: GB 9811303.8
PRIOR FILING DATE: 1998-05-26
PRIOR APPLICATION NUMBER: GB 9900157.0
PRIOR FILING DATE: 1999-01-05
NUMBER OF SEQ ID NOS: 36
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
LENGTH: 151
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-701-080C-18

Query Match 100.0%; Score 52; DB 2; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 95 PLCDLLIRC 103

RESULT 3
US-09-980-523A-2
Sequence 2, Application US/09980523A
Patent No. 6783763
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 AND E7
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
FILE REFERENCE: WO01 AO INS
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR 99/07012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
LENGTH: 158
TYPE: PRT
ORGANISM: Human Papillomavirus
US-09-980-523A-2

Query Match 100.0%; Score 52; DB 2; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.054;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
DB 102 PLCDLLIRC 110

RESULT 4

US-08-316-239B-3
Sequence 3, Application US/08316239B
Patent No. 5679509
GENERAL INFORMATION:
APPLICANT: Wheeler, Cosette M.
APPLICANT: Parmenter, Cheryl A.
TITLE OF INVENTION: Methods and a Diagnostic Aid for
TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated with an
TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia and
TITLE OF INVENTION: Cervical Cancer
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jagtiani & Associates
STREET: 6126 Rocky Way Court
CITY: Centreville
STATE: VA
COUNTRY: USA
ZIP: 20120-3400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UNME-0001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
TELEFAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-316-239B-3

Query Match 100.0%; Score 52; DB 1; Length 162;
Best Local Similarity 100.0%; Pred. No. 0.056;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
DB 102 PLCDLLIRC 110

RESULT 5
US-08-316-239B-4
Sequence 4, Application US/08316239B
Patent No. 5679509
GENERAL INFORMATION:
APPLICANT: Wheeler, Cosette M.
APPLICANT: Parmenter, Cheryl A.
TITLE OF INVENTION: Methods and a Diagnostic Aid for
TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated with an
TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia and

TITLE OF INVENTION: Cervical Cancer
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jagtiani & Associates
STREET: 6126 Rocky Way Court
CITY: Centreville
STATE: VA
COUNTRY: USA
ZIP: 20120-3400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UNME-0001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
TELEFAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-08-316-239B-4

Query Match 100.0%; Score 52; DB 1; Length 162;
Best Local Similarity 100.0%; Pred. No. 0.056;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
DB 102 PLCDLLIRC 110

RESULT 6
US-08-860-165-12
Sequence 12, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/330
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PNO157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 12
LENGTH: 172
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-12

Query Match 100.0%; Score 52; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.059;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||

Db 40 PLCDLLIRC 48

RESULT 7
US-09-359-382-12

; Sequence 12, Application US/09359382
; Patent No. 6306397

; GENERAL INFORMATION:

; APPLICANT: EDWARDS, Stirling John

; APPLICANT: COX, John Cooper

; APPLICANT: WEBB, Elizabeth Ann

; APPLICANT: FRAZER, Ian

; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS

; FILE REFERENCE: 017227/0148

; CURRENT APPLICATION NUMBER: US/09/359,382

; EARLIER FILING DATE: 1999-07-23

; EARLIER APPLICATION NUMBER: US 08/860,165

; EARLIER FILING DATE: 1997-09-22

; EARLIER APPLICATION NUMBER: PCT/AU95/00868

; EARLIER FILING DATE: 1995-12-20

; EARLIER APPLICATION NUMBER: AU PN0157/94

; EARLIER FILING DATE: 1994-12-20

; NUMBER OF SEQ ID NOS: 27

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 12

; LENGTH: 172

; TYPE: PRT

; ORGANISM: Human papillomavirus type 16

US-09-359-382-12

Query Match 100.0%; Score 52; DB 2; Length 172;

Best Local Similarity 100.0%; Pred. No. 0.059;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||

Db 40 PLCDLLIRC 48

RESULT 8

US-09-462-993-1

; Sequence 1, Application US/09462993

; Patent No. 6884786

; GENERAL INFORMATION:

; APPLICANT: KIENY, Marie-Paule

; APPLICANT: BALLOU, Jean-Marie

; APPLICANT: BIZOUARNE, Nadine

; TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC

; FILE REFERENCE: 017753-122

; CURRENT APPLICATION NUMBER: US/09/462,993

; CURRENT FILING DATE: 2000-04-17

; PRIOR APPLICATION NUMBER: PCT/FR98/01576

; PRIOR FILING DATE: 1998-07-17

; PRIOR APPLICATION NUMBER: FR 97/09152

; PRIOR FILING DATE: 1997-07-18

; NUMBER OF SEQ ID NOS: 23

; SOFTWARE: PatentIn Ver. 2.2

; SEQ ID NO 1

; LENGTH: 243

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: Derived from

; OTHER INFORMATION: human papillomavirus, strain HPV-16, E6 protein

; OTHER INFORMATION: fused F protein signals, clone E6*TMF.

US-09-462-993-1

Query Match 100.0%; Score 52; DB 2; Length 243;

Best Local Similarity 100.0%; Pred. No. 0.084;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||

Db 130 PLCDLLIRC 138

RESULT 9

US-08-860-165-10

; Sequence 10, Application US/08860165A

; Patent No. 6004557

; GENERAL INFORMATION:

; APPLICANT: EDWARDS, Stirling John

; APPLICANT: COX, John Cooper

; APPLICANT: WEBB, Elizabeth Ann

; APPLICANT: FRAZER, Ian

; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS

; FILE REFERENCE: 17227/130

; CURRENT APPLICATION NUMBER: US/08/860,165A

; CURRENT FILING DATE: 1997-09-22

; EARLIER APPLICATION NUMBER: PCT/AU95/00868

; EARLIER FILING DATE: 1995-12-20

; EARLIER APPLICATION NUMBER: AU PN0157

; EARLIER FILING DATE: 1994-12-20

; NUMBER OF SEQ ID NOS: 15

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 10

; LENGTH: 266

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion

US-08-860-165-10

Query Match 100.0%; Score 52; DB 2; Length 266;

Best Local Similarity 100.0%; Pred. No. 0.092;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||

Db 102 PLCDLLIRC 110

RESULT 10

US-09-359-382-10

; Sequence 10, Application US/09359382

; Patent No. 6306397

; GENERAL INFORMATION:

; APPLICANT: EDWARDS, Stirling John

; APPLICANT: COX, John Cooper

; APPLICANT: WEBB, Elizabeth Ann

; APPLICANT: FRAZER, Ian

; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS

; FILE REFERENCE: 017227/0148

; CURRENT APPLICATION NUMBER: US/09/359,382

; CURRENT FILING DATE: 1999-07-23

; EARLIER APPLICATION NUMBER: US 08/860,165

; EARLIER FILING DATE: 1997-09-22

; EARLIER APPLICATION NUMBER: PCT/AU95/00868

; EARLIER FILING DATE: 1995-12-20

; EARLIER APPLICATION NUMBER: AU PN0157/94

; EARLIER FILING DATE: 1994-12-20

; NUMBER OF SEQ ID NOS: 27

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 10

; LENGTH: 266

; TYPE: PRT

; ORGANISM: Human papillomavirus type 16

US-09-359-382-10

Query Match 100.0%; Score 52; DB 2; Length 266;

Best Local Similarity 100.0%; Pred. No. 0.092;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

RESULT 11
US-09-367-309A-1
; Sequence 1, Application US/09367309A
; Patent No. 6428607
; GENERAL INFORMATION:
; APPLICANT: MACFARLAN, RODERICK I.
; APPLICANT: MALIAROS, JIM
; TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
; FILE REFERENCE: 017227/0149
; CURRENT APPLICATION NUMBER: US/09/367,309A
; PRIOR FILING DATE: 1999-08-11
; PRIOR APPLICATION NUMBER: PCT/AU98/00080
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: AU PO 5178
; PRIOR FILING DATE: 1997-02-19
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

Query Match 100.0%; Score 52; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.092;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

RESULT 12
US-09-485-885-4
; Sequence 4, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-4

Query Match 100.0%; Score 52; DB 2; Length 273;
Best Local Similarity 100.0%; Pred. No. 0.095;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 208 PLCDLLIRC 216

RESULT 13
US-09-485-885-10
; Sequence 10, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-10

Query Match 100.0%; Score 52; DB 2; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 227 PLCDLLIRC 235

RESULT 14
US-09-485-885-6
; Sequence 6, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-6

Query Match 100.0%; Score 52; DB 2; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 208 PLCDLLIRC 216

RESULT 15
US-09-485-885-14

```
/ Sequence 14, Application US/09485885
/ Patent No. 6342224
/ GENERAL INFORMATION:
/ APPLICANT: Bruck, Claudine
/ APPLICANT: Cabezon Silva, Teresa
/ APPLICANT: Delisse, Anne-Marie Eva Fernande
/ APPLICANT: Gerard, Catherine Marie Ghislaine
/ APPLICANT: Lombardo-Bencheikh, Angela
/ TITLE OF INVENTION: Vaccine
/ FILE REFERENCE: B45107
/ CURRENT APPLICATION NUMBER: US/09/485,885
/ CURRENT FILING DATE: 2000-02-18
/ PRIOR APPLICATION NUMBER: PCT/EP98/05285
/ PRIOR FILING DATE: 1998-08-17
/ PRIOR APPLICATION NUMBER: GB 9717953.5
/ PRIOR FILING DATE: 1997-08-22
/ NUMBER OF SEQ ID NOS: 23
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 14
/ LENGTH: 390
/ TYPE: PRT
/ ORGANISM: Homo sapien
/ US-09-485-885-14

Query Match          100.0%; Score 52; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 PLCDLLIRC 9
        |||||
Db      227 PLCDLLIRC 235

RESULT 16
US-08-934-915-164
/ Sequence 164, Application US/08934915
/ Patent No. 5932412
/ GENERAL INFORMATION:
/ APPLICANT: DILLNER, JOAKIM
/ APPLICANT: DILLNER, LENA
/ APPLICANT: CHENG, HWEI-MING
/ TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
/ TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
/ TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
/ TITLE OF INVENTION: USEFUL IN IMMUNASSAY FOR
/ TITLE OF INVENTION: DIAGNOSTIC PURPOSES
/ NUMBER OF SEQUENCES: 193
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: MASON & ASSOCIATES, P.A.
/ STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
/ CITY: CLEARWATER
/ STATE: FLORIDA
/ COUNTRY: U.S.A.
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: Windows 3.0
/ SOFTWARE: Microsoft Word 6.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/934,915
/ FILING DATE: 22-SEP-1997
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/949,836
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: LOUISE A. Fouch
/ REGISTRATION NUMBER: 37,133
/ REFERENCE/DOCKET NUMBER: 1946.6
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 813-538-3600
/ TELEFAX: 813-538-3820
/ TELEX:
```

```
/ INFORMATION FOR SEQ ID NO: 164:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 20 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ US-08-934-915-164

Query Match          90.4%; Score 47; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 0.051;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      1 PLCDLLIRC 9
        |||||
Db      11 PLCDLLIRC 19

RESULT 17
US-09-980-523A-8
/ Sequence 8, Application US/09980523A
/ Patent No. 6783763
/ GENERAL INFORMATION:
/ APPLICANT: CHOPPIN, JEANNINE
/ APPLICANT: BOURGAULT VILLADA, ISABELLE
/ APPLICANT: GUILLET, JEAN-GERARD
/ APPLICANT: CONNAN, FRANCES
/ APPLICANT: FERRIES, ESTELLE
/ TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 AND E7
/ TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
/ FILE REFERENCE: WO1 AO INS
/ CURRENT APPLICATION NUMBER: US/09/980,523A
/ CURRENT FILING DATE: 2002-04-29
/ PRIOR APPLICATION NUMBER: PCT/FR00/01513
/ PRIOR FILING DATE: 2000-05-31
/ PRIOR APPLICATION NUMBER: FR 99/07012
/ PRIOR FILING DATE: 1999-06-03
/ NUMBER OF SEQ ID NOS: 24
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 8
/ LENGTH: 29
/ TYPE: PRT
/ ORGANISM: Human Papillomavirus
/ US-09-980-523A-8

Query Match          73.1%; Score 38; DB 2; Length 29;
Best Local Similarity 100.0%; Pred. No. 3.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 PLCDLLI 7
        |||||
Db      23 PLCDLLI 29

RESULT 18
US-09-248-796A-20508
/ Sequence 20508, Application US/09248796A
/ Patent No. 6747137
/ GENERAL INFORMATION:
/ APPLICANT: Kethel weinstock et al
/ TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
/ TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
/ FILE REFERENCE: 107196.132
/ CURRENT APPLICATION NUMBER: US/09/248,796A
/ CURRENT FILING DATE: 1999-02-12
/ PRIOR APPLICATION NUMBER: US 60/074,725
/ PRIOR FILING DATE: 1998-02-13
/ PRIOR APPLICATION NUMBER: US 60/096,409
/ PRIOR FILING DATE: 1998-08-13
/ NUMBER OF SEQ ID NOS: 28208
/ SEQ ID NO 20508
/ LENGTH: 172
/ TYPE: PRT
```

ORGANISM: Candida albicans
US-09-248-796A-20508

Query Match 69.2%; Score 36; DB 2; Length 172;
Best Local Similarity 50.0%; Pred. No. 43;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLILRC 9
DB 110 LCDLILRC 117

RESULT 19

US-09-902-540-12017
Sequence 12017, Application US/09902540
Patent No. 6633447
GENERAL INFORMATION:
APPLICANT: Goldman, Barry S.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Miegand, Roger C.
TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
FILE REFERENCE: 38-10(15849)B
CURRENT APPLICATION NUMBER: US/09/902,540
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION NUMBER: 60/217,883
PRIOR FILING DATE: 2000-07-10
NUMBER OF SEQ ID NOS: 16825
SEQ ID NO 12017
LENGTH: 343
TYPE: PRT
ORGANISM: Myxococcus xanthus
US-09-902-540-12017

Query Match 69.2%; Score 36; DB 2; Length 343;
Best Local Similarity 62.5%; Pred. No. 88;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCDLILRC 9
DB 258 LCDLVVNC 265

RESULT 20
US-09-489-039A-13746
Sequence 13746, Application US/09489039A
Patent No. 6610836
GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 13746
LENGTH: 348
TYPE: PRT
ORGANISM: Klebsiella pneumoniae
US-09-489-039A-13746

Query Match 67.3%; Score 35; DB 2; Length 348;
Best Local Similarity 66.7%; Pred. No. 1.3e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 PLCDLILRC 9
DB 53 PLVQDLVRC 61

RESULT 21

US-10-104-047-3074

Sequence 3074, Application US/10104047
Patent No. 6943241
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: NO. 6943241e1 full length cDNA
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3074
LENGTH: 407
TYPE: PRT
ORGANISM: Homo sapiens
US-10-104-047-3074

Query Match 67.3%; Score 35; DB 2; Length 407;
Best Local Similarity 66.7%; Pred. No. 1.6e+02;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 PLCDLILRC 9
DB 279 PTCITLILRC 287

RESULT 22

US-09-252-991A-31650
Sequence 31650, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 31650
LENGTH: 687
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-31650

Query Match 67.3%; Score 35; DB 2; Length 687;
Best Local Similarity 62.5%; Pred. No. 2.7e+02;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLILRC 8
DB 479 PICMLLVR 486

RESULT 23
US-09-574-749B-43
Sequence 43, Application US/09574749B
Patent No. 6548299
GENERAL INFORMATION:
APPLICANT: ROSENZWEIG, Michael
APPLICANT: PYKETT, Mark J.
APPLICANT: SCADEN, David T.
APPLICANT: POZNANSKY, Mark C.
TITLE OF INVENTION: LYMPHOID TISSUE-SPECIFIC CELL PRODUCTION
TITLE OF INVENTION: FROM HEMATOPOIETIC PROGENITOR CELLS IN THREE-DIMENSIONAL
FILE REFERENCE: C1005/7012/KA/ERG
CURRENT APPLICATION NUMBER: US/09/574,749B

CURRENT FILING DATE: 2002-05-31
PRIOR APPLICATION NUMBER: US 60/107,972
PRIOR FILING DATE: 1998-11-12
PRIOR APPLICATION NUMBER: PCT/US99/26795
PRIOR FILING DATE: 1999-11-12
PRIOR APPLICATION NUMBER: US 09/524,749
PRIOR FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 58
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 43
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Papilloma source
US-09-574-749B-43

Query Match 65.4%; Score 34; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLL 6
|||
Db 5 PLCDLL 10

RESULT 24
US-09-270-767-33183
Sequence 33183, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 33183
LENGTH: 104
TYPE: PRT
ORGANISM: Drosophila melanogaster
US-09-270-767-33183

Query Match 65.4%; Score 34; DB 2; Length 104;
Best Local Similarity 66.7%; Pred. No. 59;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||
Db 16 PLCDALGEC 24

RESULT 25
US-09-270-767-48400
Sequence 48400, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 48400
LENGTH: 104
TYPE: PRT
ORGANISM: Drosophila melanogaster
US-09-270-767-48400

Query Match 65.4%; Score 34; DB 2; Length 104;
Best Local Similarity 66.7%; Pred. No. 59;

Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 PLCDLLIRC 9
|||
Db 16 PLCDALGEC 24

RESULT 26
US-09-270-767-34129
Sequence 34129, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 34129
LENGTH: 109
TYPE: PRT
ORGANISM: Drosophila melanogaster
FEATURE:
OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-34129

Query Match 65.4%; Score 34; DB 2; Length 109;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLL 6
|||
Db 36 PLCDLL 41

RESULT 27
US-09-270-767-49346
Sequence 49346, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 49346
LENGTH: 109
TYPE: PRT
ORGANISM: Drosophila melanogaster
FEATURE:
OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-49346

Query Match 65.4%; Score 34; DB 2; Length 109;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLL 6
|||
Db 36 PLCDLL 41

RESULT 28
US-09-640-211A-1032
Sequence 1032, Application US/09640211A
Patent No. 6833446
GENERAL INFORMATION:
APPLICANT: Wood, Marion
APPLICANT: Shenk, Michael A.
APPLICANT: McGrath, Annette

APPLICANT: Glenn, Matthew
TITLE OF INVENTION: Compositions and Methods for the
FILE REFERENCE: 11000.1021C1U
CURRENT APPLICATION NUMBER: US/09/640,211A
NUMBER OF SEQ ID NOS: 2368
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1032
LENGTH: 146
TYPE: PRT
ORGANISM: Pinus radiata
US-09-640-211A-1032

Query Match 65.4%; Score 34; DB 2; Length 146;
Best Local Similarity 75.0%; Pred. No. 84;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCDLLIRC 9
||:||||
Db 68 LCELLPRC 75

RESULT 29
US-09-228-986-113
Sequence 113, Application US/09228986
Patent No. 6359198
GENERAL INFORMATION:
APPLICANT: Strabala, Timothy
APPLICANT: Neuenhuizen, Niels
TITLE OF INVENTION: Compositions Isolated from Plant Cells
FILE REFERENCE: 11000/1020
CURRENT APPLICATION NUMBER: US/09/228,986
CURRENT FILING DATE: 1999-01-12
NUMBER OF SEQ ID NOS: 130
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 113
LENGTH: 166
TYPE: PRT
ORGANISM: Pinus radiata
US-09-228-986-113

Query Match 65.4%; Score 34; DB 2; Length 166;
Best Local Similarity 75.0%; Pred. No. 95;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCDLLIRC 9
||:||||
Db 68 LCELLPRC 75

RESULT 30
US-10-101-464A-113
Sequence 113, Application US/10101464A
Patent No. 6768041
GENERAL INFORMATION:
APPLICANT: Strabala, Timothy
APPLICANT: Neuenhuizen, Nicolaas
TITLE OF INVENTION: Compositions Isolated from Plant Cells
FILE REFERENCE: 11000.1020C2
CURRENT APPLICATION NUMBER: US/10/101,464A
CURRENT FILING DATE: 2002-03-18
PRIOR APPLICATION NUMBER: 09/704,302
PRIOR FILING DATE: 2000-11-01
PRIOR APPLICATION NUMBER: 09/228,986
PRIOR FILING DATE: 1999-01-12
PRIOR APPLICATION NUMBER: 60/162,866
PRIOR FILING DATE: 1999-11-01
PRIOR APPLICATION NUMBER: PCT/US00/00724
PRIOR FILING DATE: 2000-01-11

NUMBER OF SEQ ID NOS: 989
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 113
LENGTH: 166
TYPE: PRT
ORGANISM: Pinus radiata
US-10-101-464A-113

Query Match 65.4%; Score 34; DB 2; Length 166;
Best Local Similarity 75.0%; Pred. No. 95;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCDLLIRC 9
||:||||
Db 68 LCELLPRC 75

RESULT 31
US-09-498-520A-18
Sequence 18, Application US/09498520A
Patent No. 661353
GENERAL INFORMATION:
APPLICANT: Rock, Charles O
APPLICANT: Heath, Richard J
TITLE OF INVENTION: No. 661353a1 Enoyl Reductases and Methods of Use Thereof
FILE REFERENCE: SJ-0022
CURRENT APPLICATION NUMBER: US/09/498,520A
CURRENT FILING DATE: 2000-02-04
NUMBER OF SEQ ID NOS: 62
SOFTWARE: PatentIn version 3.1
SEQ ID NO 18
LENGTH: 321
TYPE: PRT
ORGANISM: Caulobacter crescentus
US-09-498-520A-18

Query Match 65.4%; Score 34; DB 2; Length 321;
Best Local Similarity 100.0%; Pred. No. 1,9e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLL 6
|||||
Db 6 PLCDLL 11

RESULT 32
US-08-246-583-2
Sequence 2, Application US/08246583
Patent No. 5750394
GENERAL INFORMATION:
APPLICANT: Palese, Peter
APPLICANT: O'Neill, Robert
TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL
TITLE OF INVENTION: COMPOUNDS THAT INHIBIT INTERACTION OF HOST CELL PROTEINS
TITLE OF INVENTION: AND VIRAL PROTEINS REQUIRED FOR VIRAL REPLICATION
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSER: PENNIE & EDMONDS
STREET: 1155 AVENUE OF THE AMERICAS
CITY: NEW YORK
STATE: NEW YORK
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/246,583
FILING DATE: 20-MAY-1994
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:

NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 6923-040
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 527 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-246-583-2

Query Match 65.4%; Score 34; DB 1; Length 527;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PLCDLL 6
Db 426 PLCDLL 431

RESULT 33
US-09-949-016-7509
Sequence 7509, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
FILE REFERENCE: CLO01307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 7509
LENGTH: 537
TYPE: PRT
ORGANISM: Human
US-09-949-016-7509

Query Match 65.4%; Score 34; DB 2; Length 537;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PLCDLL 6
Db 426 PLCDLL 431

RESULT 34
US-08-933-227-5
Sequence 5, Application US/08933227
Patent No. 5965394
GENERAL INFORMATION:
APPLICANT: Bandman, Olga
APPLICANT: Guegler, Karl
APPLICANT: Corley, Neil
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN IMPORTIN ALPHA HOMOLOG
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Dr.
CITY: Palo Alto

STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/933,227
FILING DATE: Filed Herewith
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:

ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0394 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166

INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 538 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: Genbank
CLONE: 1708483
US-08-933-227-5

Query Match 65.4%; Score 34; DB 1; Length 538;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PLCDLL 6
Db 427 PLCDLL 432

RESULT 35
US-09-636-791A-4
Sequence 4, Application US/09636791A
Patent No. 6503703
GENERAL INFORMATION:
APPLICANT: Palese et al
TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL COMPOUNDS THAT
INHIBIT INTERACTION OF HOST CELL PROTEINS AND VIRAL
FILE REFERENCE: 6923-077-999
CURRENT APPLICATION NUMBER: US/09/636,791A
CURRENT FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/148,263
PRIOR FILING DATE: 1999-08-11
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 4
LENGTH: 538
TYPE: PRT
ORGANISM: Homo sapiens
US-09-636-791A-4

Query Match 65.4%; Score 34; DB 2; Length 538;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 PLCDLL 6
Db 427 PLCDLL 432

RESULT 36

US-09-538-092-1186
; Sequence 1186, Application US/09538092
; Patent No. 6753314
; GENERAL INFORMATION:
; APPLICANT: Gioe, Lois
; TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
; FILE REFERENCE: 15966-542
; CURRENT APPLICATION NUMBER: US/09/538, 092
; CURRENT FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: 60/127,352
; PRIOR FILING DATE: 1999-04-01
; PRIOR APPLICATION NUMBER: 60/178,965
; PRIOR FILING DATE: 2000-02-01
; NUMBER OF SEQ ID NOS: 1387
; SOFTWARE: CuratSeqFormatter Version 0.9
; SEQ ID NO 1186
; LENGTH: 538
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (0)-(0)
; OTHER INFORMATION: Polypeptide Accession Number P52294
US-09-538-092-1186
Query Match 65.4%; Score 34; DB 2; Length 538;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 PLCDLL 6
Db 427 PLCDLL 432
RESULT 37
US-08-444-994-11
; Sequence 11, Application US/08444994
; Patent No. 6890710
; GENERAL INFORMATION:
; APPLICANT: Palese, Peter
; TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL
; TITLE OF INVENTION: COMPOUNDS THAT INHIBIT INTERACTION OF HOST CELL PROTEINS
; TITLE OF INVENTION: AND VIRAL PROTEINS REQUIRED FOR VIRAL REPLICATION
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/444,994
; FILING DATE: 19-MAY-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Cortuzzi, Laura A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 6923-054
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-9741/8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 538 amino acids

;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
US-08-444-994-11
Query Match 65.4%; Score 34; DB 2; Length 538;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 PLCDLL 6
Db 427 PLCDLL 432
RESULT 38
US-09-949-016-8190
; Sequence 8190, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01307
; CURRENT APPLICATION NUMBER: US/09/949, 016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8190
; LENGTH: 540
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-8190
Query Match 65.4%; Score 34; DB 2; Length 540;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 PLCDLL 6
Db 429 PLCDLL 434
RESULT 39
US-08-246-583-3
; Sequence 3, Application US/08246583
; Patent No. 5750394
; GENERAL INFORMATION:
; APPLICANT: Palese, Peter
; TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL
; TITLE OF INVENTION: COMPOUNDS THAT INHIBIT INTERACTION OF HOST CELL PROTEINS
; TITLE OF INVENTION: AND VIRAL PROTEINS REQUIRED FOR VIRAL REPLICATION
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 AVENUE OF THE AMERICAS
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: U.S.A.
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/246,583

PIILING DATE: 20-MAY-1994
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 6923-040
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 542 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: protein
US-08-246-563-3

Query Match 65.4%; Score 34; DB 1; Length 542;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDL 6
DB 432 PLCDL 437

RESULT 40
US-09-636-791A-5
Sequence 5, Application US/09636791A
Patent No. 6503703
GENERAL INFORMATION:
APPLICANT: Palese et al
TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL COMPOUNDS THAT
TITLE OF INVENTION: INHIBIT INTERACTION OF HOST CELL PROTEINS AND VIRAL
TITLE OF INVENTION: PROTEIN REQUIRED FOR VIRAL REPLICATION
FILE REFERENCE: 6923-077-999
CURRENT APPLICATION NUMBER: US/09/636,791A
CURRENT FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: 60/148,263
PRIOR FILING DATE: 1999-08-11
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 5
LENGTH: 542
TYPE: PRT
ORGANISM: Saccharomyces cerevisiae
US-09-636-791A-5

Query Match 65.4%; Score 34; DB 2; Length 542;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDL 6
DB 432 PLCDL 437

RESULT 41
US-09-538-092-672
Sequence 672, Application US/09538092
Patent No. 675314
GENERAL INFORMATION:
APPLICANT: Glac, Loic
TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
FILE REFERENCE: 15966-542
CURRENT FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 60/127,352
PRIOR FILING DATE: 1999-04-01
PRIOR APPLICATION NUMBER: 60/178,965

PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CuratSeqFormatter Version 0.9
SEQ ID NO 672
LENGTH: 542
TYPE: PRT
ORGANISM: Saccharomyces cerevisiae
FEATURE:
NAME/KEY: misc_feature
LOCATION: (0)..(0)
OTHER INFORMATION: Polypeptide Accession Number YML189W
US-09-538-092-672

Query Match 65.4%; Score 34; DB 2; Length 542;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDL 6
DB 432 PLCDL 437

RESULT 42
US-08-444-994-12
Sequence 12, Application US/08444994
Patent No. 6890710
GENERAL INFORMATION:
APPLICANT: Palese, Peter
APPLICANT: O'Neill, Robert
TITLE OF INVENTION: IDENTIFICATION AND USE OF ANTIVIRAL
TITLE OF INVENTION: COMPOUNDS THAT INHIBIT INTERACTION OF HOST CELL PROTEINS
TITLE OF INVENTION: AND VIRAL PROTEINS REQUIRED FOR VIRAL REPLICATION
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/444,994
FILING DATE: 19-MAY-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 6923-054
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 542 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: unknown
MOLECULE TYPE: protein
US-08-444-994-12

Query Match 65.4%; Score 34; DB 2; Length 542;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDL 6
DB 432 PLCDL 437


```
RESULT 43
US-09-248-796A-19179
; Sequence 19179, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstein et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
; FILE REFERENCE: 107196.132
; CURRENT APPLICATION NUMBER: US/09/248,796A
; PRIOR FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; PRIOR FILING DATE: 1998-08-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 19179
; LENGTH: 556
; TYPE: PRT
; ORGANISM: Candida albicans
US-09-248-796A-19179

Query Match      65.4%; Score 34; DB 2; Length 556;
Best Local Similarity 100.0%; Pred. No. 3.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 PLCDLL 6
DB      443 PLCDLL 448

RESULT 44
US-10-104-047-2810
; Sequence 2810, Application US/10104047
; Patent No. 6943241
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. 6943241el full length cDNA
; FILE REFERENCE: HI-A0105
; CURRENT APPLICATION NUMBER: US/10/104,047
; PRIOR FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 2810
; LENGTH: 795
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2810

Query Match      65.4%; Score 34; DB 2; Length 795;
Best Local Similarity 85.7%; Pred. No. 4.7e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 LCDLLIR 8
DB      313 LCDLLIR 319

RESULT 45
US-09-489-039A-12083
; Sequence 12083, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
```

```
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 12083
; LENGTH: 81
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-12083

Query Match      63.5%; Score 33; DB 2; Length 81;
Best Local Similarity 62.5%; Pred. No. 69;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 PLCDLLIR 8
DB      5 PSCDMLIR 12

RESULT 46
US-09-513-999C-4376
; Sequence 4376, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6783961
; FILE REFERENCE: 59. US2. REG
; CURRENT APPLICATION NUMBER: US/09/513,999C
; CURRENT FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US 60/122,487
; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 36681
; SOFTWARE: Patent .pm
; SEQ ID NO 4376
; LENGTH: 120
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: -19...-1
; OTHER INFORMATION: score 7.6
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: 89
; OTHER INFORMATION: Xaa=Ile or Met
US-09-513-999C-4376

Query Match      63.5%; Score 33; DB 2; Length 120;
Best Local Similarity 62.5%; Pred. No. 1e+02;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      2 LCDLLIRC 9
DB      16 LCDLLIRC 23

RESULT 47
US-09-270-767-35225
; Sequence 35225, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 35225
; LENGTH: 155
```

```

; TYPE: PRT
; ORGANISM: Drosophila melanogaster
; FEATURE:
; OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-15225

Query Match
Best Local Similarity 75.0%; Score 33; DB 2; Length 155;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2 LCDLIRC 9
Db 121 LCKLIRC 128

RESULT 48
US-09-270-767-50442
; Sequence 50442, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 50442
; LENGTH: 155
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
; FEATURE:
; OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-50442

Query Match
Best Local Similarity 75.0%; Score 33; DB 2; Length 155;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2 LCDLIRC 9
Db 121 LCKLIRC 128

RESULT 49
US-09-902-540-12712
; Sequence 12712, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 12712
; LENGTH: 293
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
US-09-902-540-12712

Query Match
Best Local Similarity 63.5%; Score 33; DB 2; Length 293;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 2 LCDLIRC 9
Db 272 ICDLIRC 279
```

```

RESULT 50
US-09-489-039A-13053
; Sequence 13053, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 13053
; LENGTH: 313
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-13053

Query Match
Best Local Similarity 71.4%; Score 33; DB 2; Length 313;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 3 CDLIRC 9
Db 54 CEPLIRC 60
```

Search completed: May 5, 2006, 01:38:13
Job time : 22.2 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceeleration Ltd.

OW protein - protein search, using SW model

Run on: May 5, 2006, 07:10:32 ; Search time 68.2 Seconds
(without alignments)
55.139 Million cell updates/sec

Title: US-08-170-344-12
Perfect score: 52
Sequence: 1 PLCDLJIRC 9

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues
Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published Applications_AA_Main:*
1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
4: /cgn2_6/prodata/1/pubppaa/US10a_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppaa/US10b_PUBCOMB.pep:*
6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	52	100.0	10	5	US-10-484-063-7
2	52	100.0	15	4	US-10-476-570-38
3	52	100.0	15	4	US-10-476-570-39
4	52	100.0	20	4	US-10-476-570-35
5	52	100.0	20	5	US-10-484-063-8
6	52	100.0	29	4	US-10-476-570-13
7	52	100.0	151	4	US-10-177-390-6
8	52	100.0	151	5	US-10-484-063-20
9	52	100.0	151	5	US-10-484-063-27
10	52	100.0	158	5	US-10-858-384-2
11	52	100.0	158	5	US-10-367-057-16
12	52	100.0	158	6	US-11-021-949-13
13	52	100.0	171	4	US-10-472-724-2
14	52	100.0	243	6	US-11-072-288-1
15	52	100.0	266	3	US-09-367-309A-1
16	52	100.0	273	4	US-10-000-903-4
17	52	100.0	273	5	US-10-899-771-14
18	52	100.0	292	4	US-10-000-903-10
19	52	100.0	292	5	US-10-899-771-10
20	52	100.0	371	4	US-10-000-903-6
21	52	100.0	371	5	US-10-899-771-6
22	52	100.0	390	4	US-10-000-903-14
23	52	100.0	390	5	US-10-899-771-14
24	45	86.5	100	4	US-10-424-599-248671
25	45	86.5	155	6	US-11-021-949-22
26	43	82.7	149	6	US-11-021-949-18
27	42	80.8	644	5	US-10-450-763-31975

28	40	76.9	150	6	US-11-021-949-27	Sequence 27, App1
29	39	76.9	151	6	US-11-021-949-26	Sequence 26, App1
30	39.5	76.0	318	4	US-10-425-115-309527	Sequence 309527, A
31	39	75.0	190	5	US-10-733-923-12468	Sequence 12468, A
32	39	75.0	190	5	US-10-733-923-12757	Sequence 12757, A
33	39	75.0	379	5	US-10-485-710-135	Sequence 135, App
34	39	75.0	390	5	US-10-485-710-94	Sequence 94, App1
35	39	75.0	402	5	US-10-485-710-21	Sequence 21, App1
36	39	75.0	402	5	US-10-485-710-53	Sequence 53, App1
37	38	73.1	29	4	US-10-476-570-55	Sequence 55, App1
38	38	73.1	29	5	US-10-858-384-8	Sequence 8, App1
39	38	73.1	55	4	US-10-425-115-269200	Sequence 269200, A
40	38	73.1	148	6	US-11-021-949-19	Sequence 19, App
41	38	73.1	148	6	US-11-021-949-359	Sequence 359, App
42	38	73.1	149	6	US-11-021-949-14	Sequence 14, App1
43	38	73.1	154	4	US-10-425-114-46825	Sequence 46825, A
44	38	73.1	367	4	US-10-437-963-107183	Sequence 107183, A
45	38	73.1	526	4	US-10-437-963-177282	Sequence 177282, A
46	38	73.1	532	4	US-10-424-599-205535	Sequence 205535, A
47	38	73.1	539	4	US-10-424-599-178710	Sequence 178710, A
48	38	73.1	594	6	US-11-097-143-3294	Sequence 3294, App
49	38	73.1	701	4	US-10-094-749-3022	Sequence 3022, App
50	38	73.1	2645	5	US-10-450-763-50436	Sequence 50436, A
51	37	71.2	25	4	US-10-425-115-214157	Sequence 214157, A
52	37	71.2	26	4	US-10-424-599-259470	Sequence 259470, A
53	37	71.2	81	4	US-10-437-963-1137935	Sequence 137935, A
54	37	71.2	145	4	US-10-437-963-11338	Sequence 58563, A
55	37	71.2	157	4	US-10-425-114-58563	Sequence 67170, A
56	37	71.2	172	4	US-10-282-122A-67110	Sequence 55611, A
57	37	71.2	225	4	US-10-425-114-55611	Sequence 229151, A
58	37	71.2	236	4	US-10-424-599-229151	Sequence 51969, A
59	37	71.2	296	4	US-10-425-114-51969	Sequence 288514, A
60	37	71.2	306	4	US-10-425-115-288514	Sequence 44503, A
61	37	71.2	327	4	US-10-767-701-44503	Sequence 70555, A
62	37	71.2	347	4	US-10-425-114-70555	Sequence 288513, A
63	37	71.2	526	4	US-10-425-115-288513	Sequence 288516, A
64	37	71.2	527	4	US-10-425-115-288516	Sequence 305240, A
65	37	71.2	528	4	US-10-425-115-305240	Sequence 305218, A
66	37	71.2	529	4	US-10-425-115-305218	Sequence 45981, A
67	37	71.2	530	4	US-10-767-701-45981	Sequence 109323, A
68	37	71.2	534	4	US-10-437-963-109323	Sequence 109328, A
69	37	71.2	551	4	US-10-437-963-109328	Sequence 195482, A
70	37	71.2	556	4	US-10-425-115-195482	Sequence 288512, A
71	37	71.2	561	4	US-10-425-115-288512	Sequence 172921, A
72	37	71.2	659	4	US-10-437-963-172921	Sequence 4, App1
73	37	71.2	1048	4	US-10-152-724A-4	Sequence 230756, A
74	36	69.2	47	4	US-10-424-599-230756	Sequence 182193, A
75	36	69.2	66	4	US-10-437-963-182193	Sequence 32, App1
76	36	69.2	160	6	US-11-021-949-32	Sequence 274611, A
77	36	69.2	167	4	US-10-425-115-274611	Sequence 66360, A
78	36	69.2	441	4	US-10-282-122A-66360	Sequence 44640, A
79	36	69.2	441	4	US-10-767-701-44640	Sequence 152062, A
80	36	69.2	490	4	US-10-437-963-152062	Sequence 185793, A
81	35	67.3	43	4	US-10-425-115-185793	Sequence 251, App
82	35	67.3	55	3	US-09-986-480-251	Sequence 29185, A
83	35	67.3	55	4	US-10-425-115-291385	Sequence 251, App
84	35	67.3	64	4	US-10-863-332-251	Sequence 157951, A
85	35	67.3	64	4	US-10-424-599-135512	Sequence 135512, A
86	35	67.3	72	4	US-10-437-963-135512	Sequence 229127, A
87	35	67.3	115	4	US-10-424-599-229127	Sequence 263860, A
88	35	67.3	149	4	US-10-425-115-263860	Sequence 387, App
89	35	67.3	191	4	US-10-389-566-387	Sequence 202314, A
90	35	67.3	201	4	US-10-437-963-202314	Sequence 226148, A
91	35	67.3	240	4	US-10-425-115-226148	Sequence 1936, App
92	35	67.3	400	4	US-10-017-161-2290	Sequence 1074, App
93	35	67.3	400	4	US-10-292-798-1936	Sequence 58528, A
94	35	67.3	407	4	US-10-104-047-3074	Sequence 111737, A
95	35	67.3	463	4	US-10-450-763-58528	Sequence 8402, App
96	35	67.3	925	4	US-10-437-963-111737	Sequence 43015, A
97	35	67.3	925	5	US-10-112-944-842	Sequence 9, App1
98	35	67.3	925	5	US-10-450-763-43015	Sequence 9, App1
99	35	67.3	1178	4	US-10-041-856-9	Sequence 9, App1
100	35	67.3	1178	6	US-11-073-203-9	Sequence 9, App1

101	34	65.4	10	4	US-10-161-097-43	Sequence 43, Appl	174	33	63.5	140	3	US-09-925-301-1220	Sequence 1220, Ap
102	34	65.4	15	4	US-10-476-570-37	Sequence 37, Appl	175	33	63.5	150	5	US-10-450-753-37250	Sequence 37250, A
103	34	65.4	33	4	US-10-639-067-214	Sequence 214, App	176	33	63.5	151	4	US-10-437-963-106964	Sequence 106964,
104	34	65.4	43	5	US-10-450-763-33301	Sequence 33301, A	177	33	63.5	193	4	US-10-425-115-250076	Sequence 250076,
105	34	65.4	63	4	US-10-424-559-276423	Sequence 276423,	178	33	63.5	193	5	US-10-450-753-48595	Sequence 48595, A
106	34	65.4	66	4	US-10-425-115-302963	Sequence 302963,	179	33	63.5	207	4	US-10-424-599-62826	Sequence 262826,
107	34	65.4	69	5	US-10-450-763-44283	Sequence 44283, A	180	33	63.5	210	5	US-10-450-753-45420	Sequence 45420, A
108	34	65.4	71	3	US-09-864-761-42524	Sequence 42524, A	181	33	63.5	214	4	US-10-231-913-8	Sequence 913-8
109	34	65.4	98	4	US-10-106-698-5851	Sequence 5851, Ap	182	33	63.5	215	3	US-09-995-588-94	Sequence 94, Appl
110	34	65.4	100	4	US-10-425-115-242695	Sequence 242695,	183	33	63.5	219	5	US-10-450-763-30818	Sequence 30818, A
111	34	65.4	117	4	US-10-424-599-227300	Sequence 227300,	184	33	63.5	224	4	US-10-425-114-46594	Sequence 46594, A
112	34	65.4	146	5	US-10-029-386-33485	Sequence 33485, A	185	33	63.5	230	4	US-10-369-493-19059	Sequence 19059, A
113	34	65.4	145	4	US-10-856-499-1032	Sequence 1032, Ap	186	33	63.5	233	4	US-10-381-333-2	Sequence 2
114	34	65.4	149	6	US-11-021-949-16	Sequence 16, Appl	187	33	63.5	278	4	US-10-437-963-194955	Sequence 194955,
115	34	65.4	153	6	US-11-021-949-20	Sequence 20, Appl	188	33	63.5	302	4	US-10-146-772-362	Sequence 362, App
116	34	65.4	160	4	US-10-425-114-66322	Sequence 66322, A	189	33	63.5	302	4	US-10-241-742-62	Sequence 362, App
117	34	65.4	166	5	US-10-101-464A-113	Sequence 113, App	190	33	63.5	302	4	US-10-440-523-362	Sequence 362, App
118	34	65.4	166	5	US-10-864-252-113	Sequence 113, App	191	33	63.5	302	4	US-10-440-503-362	Sequence 362, App
119	34	65.4	168	4	US-10-437-963-199698	Sequence 199698,	192	33	63.5	302	4	US-10-461-925-362	Sequence 362, App
120	34	65.4	170	4	US-10-437-963-153746	Sequence 153746,	193	33	63.5	334	4	US-10-369-483-9024	Sequence 9024, Ap
121	34	65.4	194	4	US-10-437-963-153818	Sequence 153818,	194	33	63.5	338	3	US-09-975-719-174	Sequence 174, App
122	34	65.4	203	4	US-10-425-115-284035	Sequence 284035,	195	33	63.5	338	4	US-10-324-368-94	Sequence 24, Appl
123	34	65.4	209	4	US-10-425-115-312895	Sequence 312895,	196	33	63.5	346	4	US-10-354-358-94	Sequence 94, Appl
124	34	65.4	225	4	US-10-425-115-332541	Sequence 332541,	197	33	63.5	350	5	US-10-847-972-64	Sequence 64, Appl
125	34	65.4	237	4	US-10-425-115-188523	Sequence 188523,	198	33	63.5	393	5	US-10-732-923-12391	Sequence 12391, A
126	34	65.4	253	4	US-10-437-963-184437	Sequence 184437,	199	33	63.5	430	4	US-10-107-431-45	Sequence 45, Appl
127	34	65.4	321	5	US-10-616-550-18	Sequence 18, Appl	200	33	63.5	441	4	US-10-691-529-2	Sequence 2, Appl
128	34	65.4	391	6	US-11-097-143-33190	Sequence 33190, A	201	33	63.5	479	5	US-10-450-763-31950	Sequence 31950, A
129	34	65.4	392	5	US-10-732-923-12884	Sequence 12884, A	202	33	63.5	481	4	US-10-163-667-366	Sequence 366, App
130	34	65.4	393	5	US-10-732-923-12811	Sequence 12811, A	203	33	63.5	515	5	US-10-450-763-31949	Sequence 31949, A
131	34	65.4	394	5	US-10-732-923-12524	Sequence 12524, A	204	33	63.5	613	4	US-10-437-963-105462	Sequence 105462,
132	34	65.4	415	4	US-10-282-122A-62738	Sequence 62738, A	205	33	63.5	613	4	US-10-437-963-138701	Sequence 138701,
133	34	65.4	415	4	US-10-282-122A-64498	Sequence 64498, A	206	33	63.5	634	5	US-10-450-763-31948	Sequence 31948, A
134	34	65.4	486	4	US-10-425-115-312906	Sequence 312906,	207	33	63.5	637	5	US-10-668-936-7	Sequence 7, Appl
135	34	65.4	538	5	US-10-337-213-4	Sequence 4	208	33	63.5	655	4	US-10-369-493-3112	Sequence 112, App
136	34	65.4	538	5	US-10-724-273-11	Sequence 11, Appl	209	33	63.5	792	5	US-10-756-149-5282	Sequence 5282, Ap
137	34	65.4	542	5	US-10-337-213-5	Sequence 5	210	33	63.5	830	4	US-10-369-493-1540	Sequence 1540, Ap
138	34	65.4	542	5	US-10-369-493-1960	Sequence 1960, Ap	211	33	63.5	832	4	US-10-149-310-442	Sequence 242, App
139	34	65.4	543	4	US-10-724-273-12	Sequence 12, Appl	212	33	63.5	887	5	US-10-450-763-31953	Sequence 31953, A
140	34	65.4	543	4	US-10-032-585-7439	Sequence 7439, App	213	33	63.5	1062	4	US-10-437-963-182327	Sequence 182327,
141	34	65.4	552	4	US-10-128-714-3541	Sequence 3541, Ap	214	33	63.5	1129	5	US-10-732-923-12515	Sequence 12515, A
142	34	65.4	552	4	US-10-128-714-8541	Sequence 8541, Ap	215	33	63.5	1132	4	US-10-437-963-173378	Sequence 173378, A
143	34	65.4	576	4	US-10-369-493-10008	Sequence 10008, A	216	33	63.5	1136	5	US-10-450-763-44700	Sequence 44700, A
144	34	65.4	580	4	US-10-295-027-266	Sequence 266, App	217	33	63.5	1136	5	US-10-450-763-46229	Sequence 46229, A
145	34	65.4	580	4	US-10-408-765A-360	Sequence 360, App	218	33	63.5	1249	5	US-10-450-763-56401	Sequence 56401, A
146	34	65.4	653	4	US-10-369-493-33560	Sequence 33560, Ap	219	33	63.5	1303	5	US-10-450-763-32589	Sequence 32589, A
147	34	65.4	665	4	US-10-437-963-137549	Sequence 137549,	220	33	63.5	1484	4	US-10-437-963-163818	Sequence 163818
148	34	65.4	795	4	US-10-104-047-2810	Sequence 2810, Ap	221	33	63.5	1568	5	US-10-425-115-357308	Sequence 357308
149	34	65.4	813	4	US-10-144-194A-60	Sequence 60, Appl	222	33	63.5	1886	5	US-10-450-763-36368	Sequence 36368, A
150	34	65.4	813	5	US-10-491-566-60	Sequence 60, Appl	223	33	63.5	1924	5	US-10-450-763-36367	Sequence 36367, A
151	34	65.4	837	5	US-10-732-923-12871	Sequence 12871, A	224	33	63.5	2957	5	US-10-450-763-52573	Sequence 52573, A
152	34	65.4	1161	4	US-10-017-161-2398	Sequence 2398, Ap	225	33	63.5	5405	3	US-09-922-217-1116	Sequence 1116, Ap
153	34	65.4	1161	4	US-10-292-798-2040	Sequence 2040, Ap	226	33	63.5	5405	4	US-10-025-380-1116	Sequence 1116, Ap
154	34	65.4	1352	6	US-11-097-143-29418	Sequence 29418, A	227	33	63.5	5405	5	US-10-723-860-1647	Sequence 1647, Ap
155	34	65.4	1415	5	US-10-450-763-45143	Sequence 45143, A	228	33	63.5	5405	5	US-10-852-353A-151	Sequence 151, App
156	34	65.4	1504	4	US-10-425-115-351847	Sequence 351847, A	229	33	63.5	7337	5	US-10-450-763-82575	Sequence 82575, A
157	33.5	64.4	2424	6	US-11-097-143-31560	Sequence 31560, A	230	32.5	62.5	187	4	US-10-425-115-203841	Sequence 203841,
158	33	63.5	14	5	US-10-865-478-715	Sequence 715, App	231	32.5	62.5	219	4	US-10-767-701-44513	Sequence 34513, A
159	33	63.5	17	4	US-10-196-394-20	Sequence 20, Appl	232	32.5	62.5	4952	4	US-10-051-874-56	Sequence 56, Appl
160	33	63.5	57	4	US-10-425-115-208201	Sequence 208201,	233	32.5	62.5	5008	4	US-10-051-874-1466	Sequence 1466, App
161	33	63.5	60	4	US-10-425-115-213588	Sequence 213588,	234	32.5	62.5	5159	4	US-10-085-198-112	Sequence 112, App
162	33	63.5	66	4	US-10-425-115-351179	Sequence 351179,	235	32.5	62.5	5262	4	US-10-051-874-165	Sequence 165, App
163	33	63.5	72	3	US-09-764-877-1973	Sequence 1973, Ap	236	32.5	62.5	5262	4	US-10-051-874-167	Sequence 167, App
164	33	63.5	72	4	US-10-244-515-1973	Sequence 1973, Ap	237	32	61.5	22	4	US-10-476-570-60	Sequence 60, Appl
165	33	63.5	76	4	US-10-437-963-114776	Sequence 114776,	238	32	61.5	29	3	US-09-809-391-389	Sequence 389, App
166	33	63.5	79	4	US-10-425-115-295210	Sequence 295210,	239	32	61.5	29	3	US-09-882-171-389	Sequence 389, App
167	33	63.5	80	4	US-10-424-599-375873	Sequence 375873,	240	32	61.5	29	4	US-10-164-861-389	Sequence 389, App
168	33	63.5	82	4	US-10-425-115-190309	Sequence 190309,	241	32	61.5	60	4	US-10-437-963-141349	Sequence 141349,
169	33	63.5	88	4	US-10-425-115-199791	Sequence 199791,	242	32	61.5	63	4	US-10-425-115-218976	Sequence 218976,
170	33	63.5	99	4	US-10-437-963-157887	Sequence 157887,	243	32	61.5	64	4	US-10-425-115-366747	Sequence 266747,
171	33	63.5	101	4	US-10-767-701-40494	Sequence 40494, A	244	32	61.5	64	4	US-10-425-115-345541	Sequence 345541,
172	33	63.5	114	4	US-10-424-599-223466	Sequence 223466,	245	32	61.5	89	4	US-10-437-963-189193	Sequence 189193,
173	33	63.5	118	4	US-10-424-599-142992	Sequence 142992,	246	32	61.5	90	4	US-10-425-115-317948	Sequence 317948,

247	32	61.5	92	4	US-10-424-599-284101	Sequence 284101, A	320	32	61.5	190	5	US-10-732-923-12379	Sequence 12379, A
248	32	61.5	93	4	US-10-425-115-328492	Sequence 328492, A	321	32	61.5	190	5	US-10-732-923-12381	Sequence 12381, A
249	32	61.5	94	4	US-10-425-115-34968	Sequence 34968, A	322	32	61.5	190	5	US-10-732-923-12384	Sequence 12384, A
250	32	61.5	95	4	US-10-437-963-189549	Sequence 189549, A	323	32	61.5	190	5	US-10-732-923-12461	Sequence 12461, A
251	32	61.5	97	5	US-10-450-763-40344	Sequence 40344, A	324	32	61.5	190	5	US-10-732-923-12528	Sequence 12528, A
252	32	61.5	100	4	US-10-424-599-181431	Sequence 181431, A	325	32	61.5	190	5	US-10-732-923-12619	Sequence 12619, A
253	32	61.5	102	4	US-10-424-599-262146	Sequence 262146, A	326	32	61.5	190	5	US-10-732-923-12642	Sequence 12642, A
254	32	61.5	102	4	US-10-425-115-218631	Sequence 218631, A	327	32	61.5	190	5	US-10-732-923-12655	Sequence 12655, A
255	32	61.5	110	4	US-10-425-115-59570	Sequence 59570, A	328	32	61.5	190	5	US-10-732-923-12699	Sequence 12699, A
256	32	61.5	117	4	US-10-425-115-248340	Sequence 248340, A	329	32	61.5	190	5	US-10-732-923-12701	Sequence 12701, A
257	32	61.5	118	4	US-10-437-963-154875	Sequence 154875, A	330	32	61.5	190	5	US-10-732-923-12706	Sequence 12706, A
258	32	61.5	126	4	US-10-767-701-41947	Sequence 41947, A	331	32	61.5	190	5	US-10-732-923-12707	Sequence 12707, A
259	32	61.5	129	4	US-10-425-114-56575	Sequence 56575, A	332	32	61.5	190	5	US-10-732-923-12760	Sequence 12760, A
260	32	61.5	135	4	US-10-767-701-35214	Sequence 35214, A	333	32	61.5	191	5	US-10-732-923-12781	Sequence 12781, A
261	32	61.5	135	4	US-10-732-923-12674	Sequence 12674, A	334	32	61.5	191	5	US-10-732-923-12787	Sequence 12787, A
262	32	61.5	142	5	US-10-732-923-12731	Sequence 12731, A	335	32	61.5	191	5	US-10-732-923-12830	Sequence 12830, A
263	32	61.5	144	4	US-10-425-115-312434	Sequence 312434, A	336	32	61.5	191	5	US-10-732-923-12831	Sequence 12831, A
264	32	61.5	146	4	US-10-732-923-12683	Sequence 12683, A	337	32	61.5	191	5	US-10-732-923-12831	Sequence 12831, A
265	32	61.5	153	5	US-10-732-923-12623	Sequence 12623, A	338	32	61.5	191	5	US-10-732-923-12705	Sequence 12705, A
266	32	61.5	154	4	US-10-425-115-246759	Sequence 246759, A	339	32	61.5	191	5	Sequence 12728, A	
267	32	61.5	160	4	US-10-078-090-118	Sequence 118, App	340	32	61.5	191	5	Sequence 12760, A	
268	32	61.5	161	5	US-10-732-923-12621	Sequence 12621, A	341	32	61.5	192	5	US-10-732-923-12045	Sequence 12045, A
269	32	61.5	165	4	US-10-425-115-335521	Sequence 335521, A	342	32	61.5	192	5	US-10-732-923-12164	Sequence 12164, A
270	32	61.5	167	4	US-10-104-047-2077	Sequence 2077, App	343	32	61.5	192	5	US-10-732-923-12278	Sequence 12278, A
271	32	61.5	176	5	US-10-732-923-12640	Sequence 12640, A	344	32	61.5	192	5	US-10-732-923-12363	Sequence 12363, A
272	32	61.5	180	5	US-10-732-923-12740	Sequence 12740, A	345	32	61.5	192	5	US-10-732-923-12394	Sequence 12394, A
273	32	61.5	180	5	US-10-732-923-12165	Sequence 12165, A	346	32	61.5	192	5	US-10-732-923-12402	Sequence 12402, A
274	32	61.5	181	5	US-10-732-923-12404	Sequence 12404, A	347	32	61.5	192	5	US-10-732-923-12408	Sequence 12408, A
275	32	61.5	181	5	US-10-732-923-12409	Sequence 12409, A	348	32	61.5	192	5	US-10-732-923-12411	Sequence 12411, A
276	32	61.5	181	5	US-10-732-923-12412	Sequence 12412, A	349	32	61.5	192	5	US-10-732-923-12413	Sequence 12413, A
277	32	61.5	181	5	US-10-732-923-12697	Sequence 12697, A	350	32	61.5	192	5	US-10-732-923-12415	Sequence 12415, A
278	32	61.5	184	5	US-10-732-923-12633	Sequence 12633, A	351	32	61.5	192	5	US-10-732-923-12436	Sequence 12436, A
279	32	61.5	185	4	US-10-425-115-223103	Sequence 223103, A	352	32	61.5	192	5	US-10-732-923-12440	Sequence 12440, A
280	32	61.5	185	5	US-10-739-930-9425	Sequence 9425, App	353	32	61.5	192	5	US-10-732-923-12443	Sequence 12443, A
281	32	61.5	185	5	US-10-732-923-12616	Sequence 12616, A	354	32	61.5	192	5	US-10-732-923-12452	Sequence 12452, A
282	32	61.5	186	5	US-10-732-923-12726	Sequence 12726, A	355	32	61.5	192	5	US-10-732-923-12532	Sequence 12532, A
283	32	61.5	187	5	US-10-732-923-12050	Sequence 12050, A	356	32	61.5	192	5	US-10-732-923-12564	Sequence 12564, A
284	32	61.5	187	5	US-10-732-923-12362	Sequence 12362, A	357	32	61.5	192	5	US-10-732-923-12614	Sequence 12614, A
285	32	61.5	187	5	US-10-732-923-12382	Sequence 12382, A	358	32	61.5	192	5	US-10-732-923-12696	Sequence 12696, A
286	32	61.5	187	5	US-10-732-923-12385	Sequence 12385, A	359	32	61.5	192	5	US-10-732-923-12704	Sequence 12704, A
287	32	61.5	187	5	US-10-732-923-12395	Sequence 12395, A	360	32	61.5	192	5	US-10-732-923-12710	Sequence 12710, A
288	32	61.5	187	5	US-10-732-923-12406	Sequence 12406, A	361	32	61.5	192	5	US-10-732-923-12713	Sequence 12713, A
289	32	61.5	187	5	US-10-732-923-12406	Sequence 12406, A	362	32	61.5	192	5	US-10-732-923-12752	Sequence 12752, A
290	32	61.5	187	5	US-10-732-923-12410	Sequence 12410, A	363	32	61.5	192	5	US-10-732-923-12816	Sequence 12816, A
291	32	61.5	187	5	US-10-732-923-12416	Sequence 12416, A	364	32	61.5	192	5	US-10-732-923-12816	Sequence 12816, A
292	32	61.5	187	5	US-10-732-923-12639	Sequence 12639, A	365	32	61.5	193	5	US-10-732-923-12861	Sequence 12861, A
293	32	61.5	188	5	US-10-732-923-12052	Sequence 12052, A	366	32	61.5	193	5	US-10-732-923-12813	Sequence 12813, A
294	32	61.5	188	5	US-10-732-923-12146	Sequence 12146, A	367	32	61.5	193	5	US-10-732-923-12813	Sequence 12813, A
295	32	61.5	188	5	US-10-732-923-12442	Sequence 12442, A	368	32	61.5	193	5	US-10-732-923-12829	Sequence 12829, A
296	32	61.5	188	5	US-10-732-923-12665	Sequence 12665, A	369	32	61.5	193	5	US-10-732-923-12860	Sequence 12860, A
297	32	61.5	188	5	US-10-732-923-12698	Sequence 12698, A	370	32	61.5	193	5	US-10-732-923-12722	Sequence 12722, A
298	32	61.5	188	5	US-10-732-923-12700	Sequence 12700, A	371	32	61.5	193	5	US-10-732-923-12753	Sequence 12753, A
299	32	61.5	188	5	US-10-732-923-12709	Sequence 12709, A	372	32	61.5	193	5	US-10-732-923-12785	Sequence 12785, A
300	32	61.5	188	5	US-10-732-923-12711	Sequence 12711, A	373	32	61.5	194	5	US-10-732-923-12839	Sequence 12839, A
301	32	61.5	189	4	US-10-425-114-69566	Sequence 69566, A	374	32	61.5	194	5	US-10-732-923-12839	Sequence 12839, A
302	32	61.5	189	4	US-10-767-701-44552	Sequence 44552, A	375	32	61.5	195	5	US-10-732-923-12815	Sequence 12815, A
303	32	61.5	189	4	US-10-732-923-12046	Sequence 12046, A	376	32	61.5	195	5	US-10-732-923-12875	Sequence 12875, A
304	32	61.5	189	5	US-10-732-923-12047	Sequence 12047, A	377	32	61.5	195	5	US-10-732-923-12875	Sequence 12875, A
305	32	61.5	189	5	US-10-732-923-12049	Sequence 12049, A	378	32	61.5	195	5	US-10-732-923-12785	Sequence 12785, A
306	32	61.5	189	5	US-10-732-923-12166	Sequence 12166, A	379	32	61.5	195	5	US-10-732-923-12785	Sequence 12785, A
307	32	61.5	189	5	US-10-732-923-12364	Sequence 12364, A	380	32	61.5	196	5	US-10-732-923-12741	Sequence 12741, A
308	32	61.5	189	5	US-10-732-923-12386	Sequence 12386, A	381	32	61.5	196	5	US-10-732-923-12741	Sequence 12741, A
309	32	61.5	189	5	US-10-732-923-12414	Sequence 12414, A	382	32	61.5	197	4	US-10-425-114-59907	Sequence 59907, A
310	32	61.5	189	5	US-10-732-923-12432	Sequence 12432, A	383	32	61.5	197	4	US-10-425-114-59907	Sequence 59907, A
311	32	61.5	189	5	US-10-732-923-12441	Sequence 12441, A	384	32	61.5	198	5	US-10-732-923-12586	Sequence 12586, A
312	32	61.5	190	4	US-10-425-115-324485	Sequence 324485, A	385	32	61.5	198	5	US-10-732-923-12606	Sequence 12606, A
313	32	61.5	190	4	US-10-732-923-12051	Sequence 12051, A	386	32	61.5	200	4	US-10-425-114-56936	Sequence 56936, A
314	32	61.5	190	5	US-10-732-923-12053	Sequence 12053, A	387	32	61.5	200	4	US-10-732-923-12635	Sequence 12635, A
315	32	61.5	190	5	US-10-732-923-12054	Sequence 12054, A	388	32	61.5	204	5	US-10-732-923-12141	Sequence 12141, A
316	32	61.5	190	5	US-10-732-923-12179	Sequence 12179, A	389	32	61.5	205	5	US-10-732-923-12179	Sequence 12179, A
317	32	61.5	190	5	US-10-732-923-12180	Sequence 12180, A	390	32	61.5	206	5	US-10-732-923-12140	Sequence 12140, A
318	32	61.5	190	5	US-10-732-923-12181	Sequence 12181, A	391	32	61.5	206	5	US-10-732-923-12388	Sequence 12388, A
319	32	61.5	190	5	US-10-732-923-12182	Sequence 12182, A	392	32	61.5	214	4	US-10-437-963-171104	Sequence 171104, A

393	61.5	222	4	US-10-425-114-51912	Sequence 51912, A	466	32	61.5	309	5	US-10-733-923-12119	Sequence 12119, A
394	61.5	226	4	US-10-282-122A-60120	Sequence 60120, A	467	32	61.5	311	4	US-10-236-699-3	Sequence 3, Appl1
395	61.5	227	4	US-10-425-115-228493	Sequence 228493, A	468	32	61.5	311	4	US-10-424-559-16685	Sequence 16685, A
396	61.5	227	4	US-10-425-115-333768	Sequence 333768, A	469	32	61.5	312	4	US-10-425-114-72606	Sequence 72606, A
397	61.5	228	6	US-11-097-143-1182	Sequence 1182, Ap	470	32	61.5	313	4	US-10-236-699-18	Sequence 18, Appl1
398	61.5	230	4	US-10-425-115-338929	Sequence 338929, A	471	32	61.5	313	4	US-10-311-764-5	Sequence 5, Appl1
399	61.5	231	4	US-10-437-963-106077	Sequence 106077, A	472	32	61.5	313	4	US-10-425-115-206995	Sequence 206995, A
400	61.5	232	4	US-10-425-115-200387	Sequence 200387, A	473	32	61.5	313	6	US-11-097-143-15735	Sequence 15735, A
401	61.5	235	4	US-10-425-114-60323	Sequence 60323, A	474	32	61.5	314	4	US-10-236-699-24	Sequence 24, Appl1
402	61.5	235	4	US-10-425-114-289537	Sequence 289537, A	475	32	61.5	314	4	US-10-424-599-19115	Sequence 19115, A
403	61.5	239	4	US-10-425-114-70693	Sequence 70693, A	476	32	61.5	314	5	US-10-733-923-12914	Sequence 12914, A
404	61.5	245	5	US-10-732-923-12085	Sequence 12084, A	477	32	61.5	318	4	US-10-369-493-6189	Sequence 6189, Ap
405	61.5	245	5	US-10-732-923-12085	Sequence 12085, A	478	32	61.5	321	4	US-10-369-493-5904	Sequence 5904, Ap
406	61.5	245	5	US-10-732-923-12093	Sequence 12092, A	479	32	61.5	322	4	US-10-437-963-17319	Sequence 17319, A
407	61.5	245	5	US-10-732-923-12093	Sequence 12093, A	480	32	61.5	323	5	US-10-733-923-12800	Sequence 12800, A
408	61.5	245	5	US-10-732-923-12094	Sequence 12094, A	481	32	61.5	327	4	US-10-425-114-56755	Sequence 56755, A
409	61.5	245	5	US-10-732-923-12095	Sequence 12095, A	482	32	61.5	332	5	US-10-733-923-12783	Sequence 12783, A
410	61.5	245	5	US-10-732-923-12096	Sequence 12096, A	483	32	61.5	333	5	US-10-733-923-12777	Sequence 12777, A
411	61.5	245	5	US-10-732-923-12107	Sequence 12107, A	484	32	61.5	333	5	US-10-733-923-12801	Sequence 12801, A
412	61.5	245	5	US-10-732-923-12112	Sequence 12112, A	485	32	61.5	335	5	US-10-450-763-11102	Sequence 31102, A
413	61.5	245	5	US-10-732-923-12113	Sequence 12113, A	486	32	61.5	341	5	US-10-733-923-12029	Sequence 12029, A
414	61.5	245	5	US-10-732-923-12114	Sequence 12114, A	487	32	61.5	341	5	US-10-733-923-12148	Sequence 12148, A
415	61.5	245	5	US-10-732-923-12114	Sequence 12114, A	488	32	61.5	341	5	US-10-733-923-12347	Sequence 12347, A
416	61.5	245	5	US-10-732-923-12122	Sequence 12122, A	489	32	61.5	345	5	US-10-733-923-12159	Sequence 12159, A
417	61.5	245	5	US-10-732-923-12123	Sequence 12123, A	490	32	61.5	345	4	US-10-425-115-223093	Sequence 223093, A
418	61.5	245	5	US-10-732-923-12134	Sequence 12134, A	491	32	61.5	350	4	US-10-424-599-284633	Sequence 284633, A
419	61.5	245	5	US-10-732-923-12135	Sequence 12135, A	492	32	61.5	351	4	US-10-282-122A-58364	Sequence 58364, A
420	61.5	245	5	US-10-732-923-12136	Sequence 12136, A	493	32	61.5	351	4	US-10-282-122A-66875	Sequence 66875, A
421	61.5	245	5	US-10-732-923-12137	Sequence 12137, A	494	32	61.5	352	5	US-10-733-923-12040	Sequence 12040, A
422	61.5	245	5	US-10-732-923-12190	Sequence 12190, A	495	32	61.5	353	4	US-10-282-122A-72666	Sequence 72666, A
423	61.5	245	5	US-10-732-923-12191	Sequence 12191, A	496	32	61.5	353	5	US-10-733-923-12782	Sequence 12782, A
424	61.5	245	5	US-10-732-923-12500	Sequence 12500, A	497	32	61.5	356	4	US-10-282-122A-59523	Sequence 59523, A
425	61.5	245	5	US-10-732-923-12504	Sequence 12504, A	498	32	61.5	356	5	US-10-733-923-12541	Sequence 12541, A
426	61.5	245	5	US-10-732-923-12534	Sequence 12534, A	499	32	61.5	358	5	US-10-733-923-12088	Sequence 12088, A
427	61.5	245	5	US-10-732-923-12535	Sequence 12535, A	500	32	61.5	358	5	US-10-733-923-12091	Sequence 12091, A
428	61.5	245	5	US-10-732-923-12792	Sequence 12792, A	501	32	61.5	358	5	US-10-733-923-12189	Sequence 12189, A
429	61.5	245	5	US-10-732-923-12793	Sequence 12793, A	502	32	61.5	358	5	US-10-733-923-12420	Sequence 12420, A
430	61.5	248	4	US-10-424-599-170310	Sequence 170310, A	503	32	61.5	359	4	US-10-282-122A-75949	Sequence 75949, A
431	61.5	255	4	US-10-437-963-151136	Sequence 151136, A	504	32	61.5	360	5	US-10-733-923-12068	Sequence 12068, A
432	61.5	257	4	US-10-369-493-13223	Sequence 13223, A	505	32	61.5	360	5	US-10-733-923-12160	Sequence 12160, A
433	61.5	264	4	US-10-425-114-63642	Sequence 63642, A	506	32	61.5	361	5	US-10-733-923-12192	Sequence 12192, A
434	61.5	264	4	US-10-437-963-192894	Sequence 192894, A	507	32	61.5	361	5	US-10-733-923-12078	Sequence 12078, A
435	61.5	273	5	US-10-491-467-39	Sequence 39, Appl	508	32	61.5	361	5	US-10-733-923-12077	Sequence 12077, A
436	61.5	283	4	US-10-425-115-303179	Sequence 303179, A	509	32	61.5	361	5	US-10-733-923-12098	Sequence 12098, A
437	61.5	283	5	US-10-723-860-2357	Sequence 2357, Ap	510	32	61.5	361	5	US-10-733-923-12116	Sequence 12116, A
438	61.5	283	5	US-10-751-736-122	Sequence 122, App	511	32	61.5	361	5	US-10-733-923-12506	Sequence 12506, A
439	61.5	292	4	US-10-425-115-195365	Sequence 195365, A	512	32	61.5	362	5	US-10-733-923-12064	Sequence 12064, A
440	61.5	293	4	US-10-437-963-170054	Sequence 170054, A	513	32	61.5	362	5	US-10-733-923-12078	Sequence 12078, A
441	61.5	295	5	US-10-732-923-12608	Sequence 12608, A	514	32	61.5	363	5	US-10-733-923-12069	Sequence 12069, A
442	61.5	297	4	US-10-282-122A-46649	Sequence 46649, A	515	32	61.5	363	5	US-10-733-923-12076	Sequence 12076, A
443	61.5	304	5	US-10-739-930-6773	Sequence 6773, Ap	516	32	61.5	363	5	US-10-733-923-12089	Sequence 12089, A
444	61.5	304	5	US-10-739-930-10910	Sequence 10910, A	517	32	61.5	363	5	US-10-733-923-12120	Sequence 12120, A
445	61.5	304	5	US-10-732-923-12481	Sequence 12481, A	518	32	61.5	363	5	US-10-733-923-12121	Sequence 12121, A
446	61.5	306	3	US-09-828-302-13	Sequence 13, Appl	519	32	61.5	363	5	US-10-733-923-12509	Sequence 12509, A
447	61.5	306	4	US-10-236-699-8	Sequence 8, Appl1	520	32	61.5	364	5	US-10-733-923-12063	Sequence 12063, A
448	61.5	306	4	US-10-236-699-22	Sequence 22, Appl1	521	32	61.5	364	5	US-10-733-923-12074	Sequence 12074, A
449	61.5	306	4	US-10-236-699-32	Sequence 32, Appl1	522	32	61.5	364	5	US-10-733-923-12090	Sequence 12090, A
450	61.5	306	4	US-10-764-259-13	Sequence 13, Appl1	523	32	61.5	364	5	US-10-733-923-12115	Sequence 12115, A
451	61.5	306	4	US-10-425-115-345205	Sequence 345205, A	524	32	61.5	364	5	US-10-733-923-12105	Sequence 12105, A
452	61.5	307	4	US-10-236-699-26	Sequence 26, Appl1	525	32	61.5	364	5	US-10-733-923-12505	Sequence 12505, A
453	61.5	307	4	US-10-424-599-163708	Sequence 163708, A	526	32	61.5	365	5	US-10-733-923-12066	Sequence 12066, A
454	61.5	307	4	US-10-437-963-103935	Sequence 103935, A	527	32	61.5	365	5	US-10-733-923-12101	Sequence 12101, A
455	61.5	307	4	US-10-437-963-143206	Sequence 143206, A	528	32	61.5	365	5	US-10-733-923-12359	Sequence 12359, A
456	61.5	307	4	US-10-425-115-287936	Sequence 287936, A	529	32	61.5	365	5	US-10-733-923-12360	Sequence 12360, A
457	61.5	307	4	US-10-425-115-287936	Sequence 287936, A	530	32	61.5	366	5	US-10-437-963-174105	Sequence 174105, A
458	61.5	307	6	US-11-097-143-1167	Sequence 1167, Ap	531	32	61.5	367	4	US-10-437-963-12181	Sequence 12181, A
459	61.5	308	4	US-10-425-115-333776	Sequence 333776, A	532	32	61.5	368	5	US-10-733-923-12405	Sequence 12405, A
460	61.5	309	4	US-10-060-065-24	Sequence 24, Appl1	533	32	61.5	369	4	US-09-801-368-168	Sequence 266, App
461	61.5	309	4	US-10-060-065-39	Sequence 39, Appl1	534	32	61.5	369	5	US-10-369-493-15568	Sequence 15568, Ap
462	61.5	309	4	US-10-059-585-45	Sequence 45, Appl1	535	32	61.5	370	4	US-10-733-923-12118	Sequence 12118, A
463	61.5	309	4	US-10-059-585-60	Sequence 60, Appl1	536	32	61.5	370	5	US-10-425-115-333772	Sequence 333772, A
464	61.5	309	4	US-10-059-585-60	Sequence 60, Appl1	537	32	61.5	370	5	US-10-733-923-12073	Sequence 12073, A
465	61.5	309	5	US-10-386-971-3	Sequence 3, Appl1	538	32	61.5	371	5	US-10-733-923-12125	Sequence 12125, A

539	32	61.5	371	5	US-10-732-923-12126	Sequence 12126, A	612	32	61.5	390	5	US-10-732-923-12537	Sequence 12537, A
540	32	61.5	373	5	US-10-732-923-12072	Sequence 12072, A	613	32	61.5	391	5	US-10-732-923-12150	Sequence 12150, A
541	32	61.5	373	5	US-10-732-923-12199	Sequence 12199, A	614	32	61.5	391	5	US-10-732-923-12152	Sequence 12152, A
542	32	61.5	374	4	US-10-425-114-40943	Sequence 40943, A	615	32	61.5	391	5	US-10-732-923-12177	Sequence 12177, A
543	32	61.5	374	5	US-10-732-923-12017	Sequence 12017, A	616	32	61.5	391	5	US-10-732-923-12419	Sequence 12419, A
544	32	61.5	374	5	US-10-732-923-12041	Sequence 12041, A	617	32	61.5	391	5	US-10-732-923-12492	Sequence 12492, A
545	32	61.5	374	5	US-10-732-923-12042	Sequence 12042, A	618	32	61.5	391	5	US-10-732-923-12546	Sequence 12546, A
546	32	61.5	374	5	US-10-732-923-12067	Sequence 12067, A	619	32	61.5	392	5	US-10-732-923-12139	Sequence 12139, A
547	32	61.5	374	5	US-10-732-923-12075	Sequence 12075, A	620	32	61.5	392	5	US-10-732-923-12139	Sequence 12139, A
548	32	61.5	374	5	US-10-732-923-12079	Sequence 12079, A	621	32	61.5	392	5	US-10-732-923-12139	Sequence 12139, A
549	32	61.5	374	5	US-10-732-923-12080	Sequence 12080, A	622	32	61.5	392	5	US-10-732-923-12139	Sequence 12139, A
550	32	61.5	374	5	US-10-732-923-12081	Sequence 12081, A	623	32	61.5	392	5	US-10-732-923-12156	Sequence 12156, A
551	32	61.5	374	5	US-10-732-923-12082	Sequence 12082, A	624	32	61.5	392	5	US-10-732-923-12184	Sequence 12184, A
552	32	61.5	374	5	US-10-732-923-12083	Sequence 12083, A	625	32	61.5	392	5	US-10-732-923-12201	Sequence 12201, A
553	32	61.5	374	5	US-10-732-923-12086	Sequence 12086, A	626	32	61.5	392	5	US-10-732-923-12202	Sequence 12202, A
554	32	61.5	374	5	US-10-732-923-12087	Sequence 12087, A	627	32	61.5	392	5	US-10-732-923-12203	Sequence 12203, A
555	32	61.5	374	5	US-10-732-923-12099	Sequence 12099, A	628	32	61.5	392	5	US-10-732-923-12204	Sequence 12204, A
556	32	61.5	374	5	US-10-732-923-12100	Sequence 12100, A	629	32	61.5	392	5	US-10-732-923-12210	Sequence 12210, A
557	32	61.5	374	5	US-10-732-923-12102	Sequence 12102, A	630	32	61.5	392	5	US-10-732-923-12212	Sequence 12212, A
558	32	61.5	374	5	US-10-732-923-12103	Sequence 12103, A	631	32	61.5	392	5	US-10-732-923-12213	Sequence 12213, A
559	32	61.5	374	5	US-10-732-923-12105	Sequence 12105, A	632	32	61.5	392	5	US-10-732-923-12215	Sequence 12215, A
560	32	61.5	374	5	US-10-732-923-12106	Sequence 12106, A	633	32	61.5	392	5	US-10-732-923-12218	Sequence 12218, A
561	32	61.5	374	5	US-10-732-923-12108	Sequence 12108, A	634	32	61.5	392	5	US-10-732-923-12219	Sequence 12219, A
562	32	61.5	374	5	US-10-732-923-12109	Sequence 12109, A	635	32	61.5	392	5	US-10-732-923-12220	Sequence 12220, A
563	32	61.5	374	5	US-10-732-923-12110	Sequence 12110, A	636	32	61.5	392	5	US-10-732-923-12221	Sequence 12221, A
564	32	61.5	374	5	US-10-732-923-12111	Sequence 12111, A	637	32	61.5	392	5	US-10-732-923-12223	Sequence 12223, A
565	32	61.5	374	5	US-10-732-923-12117	Sequence 12117, A	638	32	61.5	392	5	US-10-732-923-12225	Sequence 12225, A
566	32	61.5	374	5	US-10-732-923-12117	Sequence 12117, A	639	32	61.5	392	5	US-10-732-923-12226	Sequence 12226, A
567	32	61.5	374	5	US-10-732-923-12124	Sequence 12124, A	640	32	61.5	392	5	US-10-732-923-12227	Sequence 12227, A
568	32	61.5	374	5	US-10-732-923-12127	Sequence 12127, A	641	32	61.5	392	5	US-10-732-923-12228	Sequence 12228, A
569	32	61.5	374	5	US-10-732-923-12128	Sequence 12128, A	642	32	61.5	392	5	US-10-732-923-12229	Sequence 12229, A
570	32	61.5	374	5	US-10-732-923-12129	Sequence 12129, A	643	32	61.5	392	5	US-10-732-923-12230	Sequence 12230, A
571	32	61.5	374	5	US-10-732-923-12130	Sequence 12130, A	644	32	61.5	392	5	US-10-732-923-12231	Sequence 12231, A
572	32	61.5	374	5	US-10-732-923-12131	Sequence 12131, A	645	32	61.5	392	5	US-10-732-923-12232	Sequence 12232, A
573	32	61.5	374	5	US-10-732-923-12188	Sequence 12188, A	646	32	61.5	392	5	US-10-732-923-12233	Sequence 12233, A
574	32	61.5	374	5	US-10-732-923-12507	Sequence 12507, A	647	32	61.5	392	5	US-10-732-923-12235	Sequence 12235, A
575	32	61.5	374	5	US-10-732-923-12788	Sequence 12788, A	648	32	61.5	392	5	US-10-732-923-12236	Sequence 12236, A
576	32	61.5	374	5	US-10-732-923-12787	Sequence 12787, A	649	32	61.5	392	5	US-10-732-923-12237	Sequence 12237, A
577	32	61.5	376	4	US-10-425-114-63887	Sequence 63887, A	650	32	61.5	392	5	US-10-732-923-12238	Sequence 12238, A
578	32	61.5	376	5	US-10-732-923-12280	Sequence 12280, A	651	32	61.5	392	5	US-10-732-923-12239	Sequence 12239, A
579	32	61.5	376	5	US-10-732-923-12305	Sequence 12305, A	652	32	61.5	392	5	US-10-732-923-12240	Sequence 12240, A
580	32	61.5	376	5	US-10-732-923-12306	Sequence 12306, A	653	32	61.5	392	5	US-10-732-923-12241	Sequence 12241, A
581	32	61.5	376	5	US-10-732-923-12369	Sequence 12369, A	654	32	61.5	392	5	US-10-732-923-12242	Sequence 12242, A
582	32	61.5	376	5	US-10-732-923-12526	Sequence 12526, A	655	32	61.5	392	5	US-10-732-923-12243	Sequence 12243, A
583	32	61.5	376	5	US-10-732-923-12574	Sequence 12574, A	656	32	61.5	392	5	US-10-732-923-12244	Sequence 12244, A
584	32	61.5	376	5	US-10-732-923-12576	Sequence 12576, A	657	32	61.5	392	5	US-10-732-923-12245	Sequence 12245, A
585	32	61.5	376	5	US-10-732-923-12772	Sequence 12772, A	658	32	61.5	392	5	US-10-732-923-12247	Sequence 12247, A
586	32	61.5	376	5	US-10-732-923-12774	Sequence 12774, A	659	32	61.5	392	5	US-10-732-923-12248	Sequence 12248, A
587	32	61.5	376	5	US-10-732-923-12775	Sequence 12775, A	660	32	61.5	392	5	US-10-732-923-12249	Sequence 12249, A
588	32	61.5	376	5	US-10-732-923-12780	Sequence 12780, A	661	32	61.5	392	5	US-10-732-923-12250	Sequence 12250, A
589	32	61.5	376	5	US-10-732-923-12795	Sequence 12795, A	662	32	61.5	392	5	US-10-732-923-12251	Sequence 12251, A
590	32	61.5	376	5	US-10-732-923-12796	Sequence 12796, A	663	32	61.5	392	5	US-10-732-923-12252	Sequence 12252, A
591	32	61.5	376	5	US-10-732-923-12797	Sequence 12797, A	664	32	61.5	392	5	US-10-732-923-12253	Sequence 12253, A
592	32	61.5	376	5	US-10-732-923-12798	Sequence 12798, A	665	32	61.5	392	5	US-10-732-923-12254	Sequence 12254, A
593	32	61.5	376	5	US-10-732-923-12799	Sequence 12799, A	666	32	61.5	392	5	US-10-732-923-12255	Sequence 12255, A
594	32	61.5	377	4	US-09-801-368-270	Sequence 270, App	667	32	61.5	392	5	US-10-732-923-12243	Sequence 12243, A
595	32	61.5	377	4	US-10-369-493-1551	Sequence 1551, App	668	32	61.5	392	5	US-10-732-923-12244	Sequence 12244, A
596	32	61.5	380	5	US-10-732-923-12216	Sequence 12216, A	669	32	61.5	392	5	US-10-732-923-12245	Sequence 12245, A
597	32	61.5	381	4	US-10-767-701-46140	Sequence 46140, A	670	32	61.5	392	5	US-10-732-923-12247	Sequence 12247, A
598	32	61.5	381	5	US-10-732-923-12294	Sequence 12294, A	671	32	61.5	392	5	US-10-732-923-12248	Sequence 12248, A
599	32	61.5	381	5	US-10-732-923-12575	Sequence 12575, A	672	32	61.5	392	5	US-10-732-923-12249	Sequence 12249, A
600	32	61.5	384	5	US-10-732-923-12292	Sequence 12292, A	673	32	61.5	392	5	US-10-732-923-12250	Sequence 12250, A
601	32	61.5	384	5	US-10-732-923-12693	Sequence 12693, A	674	32	61.5	392	5	US-10-732-923-12251	Sequence 12251, A
602	32	61.5	385	5	US-10-732-923-12157	Sequence 12157, A	675	32	61.5	392	5	US-10-732-923-12252	Sequence 12252, A
603	32	61.5	386	5	US-10-732-923-12489	Sequence 12489, A	676	32	61.5	392	5	US-10-732-923-12253	Sequence 12253, A
604	32	61.5	386	5	US-10-450-763-42720	Sequence 42720, A	677	32	61.5	392	5	US-10-732-923-12255	Sequence 12255, A
605	32	61.5	387	5	US-10-732-923-13372	Sequence 13372, A	678	32	61.5	392	5	US-10-732-923-12257	Sequence 12257, A
606	32	61.5	388	4	US-10-425-115-345209	Sequence 345209, A	679	32	61.5	392	5	US-10-732-923-12257	Sequence 12257, A
607	32	61.5	388	5	US-10-732-923-12373	Sequence 12373, A	680	32	61.5	392	5	US-10-732-923-12258	Sequence 12258, A
608	32	61.5	388	5	US-10-732-923-12478	Sequence 12478, A	681	32	61.5	392	5	US-10-732-923-12260	Sequence 12260, A
609	32	61.5	390	5	US-10-732-923-12175	Sequence 12175, A	682	32	61.5	392	5	US-10-732-923-12261	Sequence 12261, A
610	32	61.5	390	5	US-10-732-923-12222	Sequence 12222, A	683	32	61.5	392	5	US-10-732-923-12262	Sequence 12262, A
611	32	61.5	390	5	US-10-732-923-12229	Sequence 12229, A	684	32	61.5	392	5	US-10-732-923-12263	Sequence 12263, A

685	32	61.5	392	5	US-10-732-923-12264	Sequence 12264, A	758	32	61.5	395	5	US-10-732-923-12467	Sequence 12467, A
686	32	61.5	392	5	US-10-732-923-12265	Sequence 12265, A	759	32	61.5	396	4	US-10-424-559-24928	Sequence 24928, A
687	32	61.5	392	5	US-10-732-923-12266	Sequence 12266, A	760	32	61.5	396	4	US-10-425-115-33773	Sequence 33773, A
688	32	61.5	392	5	US-10-732-923-12267	Sequence 12267, A	761	32	61.5	396	5	US-10-732-923-12487	Sequence 12487, A
689	32	61.5	392	5	US-10-732-923-12285	Sequence 12285, A	762	32	61.5	396	5	US-10-732-923-12525	Sequence 12525, A
690	32	61.5	392	5	US-10-732-923-12286	Sequence 12286, A	763	32	61.5	396	5	US-10-732-923-12539	Sequence 12539, A
691	32	61.5	392	5	US-10-732-923-12287	Sequence 12287, A	764	32	61.5	396	5	US-10-732-923-12763	Sequence 12763, A
692	32	61.5	392	5	US-10-732-923-12288	Sequence 12288, A	765	32	61.5	397	5	US-10-732-923-12033	Sequence 12033, A
693	32	61.5	392	5	US-10-732-923-12290	Sequence 12290, A	766	32	61.5	397	5	US-10-732-923-12144	Sequence 12144, A
694	32	61.5	392	5	US-10-732-923-12291	Sequence 12291, A	767	32	61.5	397	5	US-10-732-923-12196	Sequence 12196, A
695	32	61.5	392	5	US-10-732-923-12293	Sequence 12293, A	768	32	61.5	397	5	US-10-732-923-12480	Sequence 12480, A
696	32	61.5	392	5	US-10-732-923-12295	Sequence 12295, A	769	32	61.5	397	5	US-10-732-923-12809	Sequence 12809, A
697	32	61.5	392	5	US-10-732-923-12296	Sequence 12296, A	770	32	61.5	398	5	US-10-732-923-12030	Sequence 12030, A
698	32	61.5	392	5	US-10-732-923-12297	Sequence 12297, A	771	32	61.5	407	5	US-10-732-923-12431	Sequence 12431, A
699	32	61.5	392	5	US-10-732-923-12298	Sequence 12298, A	772	32	61.5	407	5	US-10-732-923-12680	Sequence 12680, A
700	32	61.5	392	5	US-10-732-923-12299	Sequence 12299, A	773	32	61.5	412	5	US-10-732-923-12196	Sequence 12196, A
701	32	61.5	392	5	US-10-732-923-12300	Sequence 12300, A	774	32	61.5	414	5	US-10-732-923-12151	Sequence 12151, A
702	32	61.5	392	5	US-10-732-923-12301	Sequence 12301, A	775	32	61.5	414	5	US-10-732-923-12172	Sequence 12172, A
703	32	61.5	392	5	US-10-732-923-12302	Sequence 12302, A	776	32	61.5	415	5	US-10-732-923-12538	Sequence 12538, A
704	32	61.5	392	5	US-10-732-923-12303	Sequence 12303, A	777	32	61.5	419	4	US-10-369-493-2498	Sequence 2498, Ap
705	32	61.5	392	5	US-10-732-923-12304	Sequence 12304, A	778	32	61.5	422	4	US-10-017-161-2400	Sequence 2400, Ap
706	32	61.5	392	5	US-10-732-923-12324	Sequence 12324, A	779	32	61.5	422	4	US-10-292-798-2042	Sequence 2042, Ap
707	32	61.5	392	5	US-10-732-923-12325	Sequence 12325, A	780	32	61.5	423	5	US-10-732-923-12761	Sequence 12761, A
708	32	61.5	392	5	US-10-732-923-12326	Sequence 12326, A	781	32	61.5	424	5	US-10-732-923-12865	Sequence 12865, A
709	32	61.5	392	5	US-10-732-923-12490	Sequence 12490, A	782	32	61.5	430	4	US-10-084-846A-62	Sequence 62, App1
710	32	61.5	392	5	US-10-732-923-12496	Sequence 12496, A	783	32	61.5	431	5	US-10-732-923-1241	Sequence 4241, Ap
711	32	61.5	392	5	US-10-732-923-12529	Sequence 12529, A	784	32	61.5	435	5	US-10-732-923-12194	Sequence 12194, A
712	32	61.5	392	5	US-10-732-923-12539	Sequence 12539, A	785	32	61.5	444	5	US-10-732-923-12767	Sequence 12767, A
713	32	61.5	392	5	US-10-732-923-12610	Sequence 12610, A	786	32	61.5	448	5	US-10-732-923-12147	Sequence 12147, A
714	32	61.5	392	5	US-10-732-923-12769	Sequence 12769, A	787	32	61.5	459	5	US-10-732-923-12187	Sequence 12187, A
715	32	61.5	392	5	US-10-732-923-12787	Sequence 12787, A	788	32	61.5	461	5	US-10-437-963-17462	Sequence 17462, A
716	32	61.5	393	5	US-10-732-923-12168	Sequence 12168, A	789	32	61.5	461	5	US-10-732-923-12503	Sequence 12503, A
717	32	61.5	393	5	US-10-732-923-12246	Sequence 12246, A	790	32	61.5	465	5	US-10-732-923-12768	Sequence 12768, A
718	32	61.5	393	5	US-10-732-923-12370	Sequence 12370, A	791	32	61.5	465	5	US-10-732-923-12803	Sequence 12803, A
719	32	61.5	393	5	US-10-732-923-12427	Sequence 12427, A	792	32	61.5	465	5	US-10-450-763-35595	Sequence 35595, A
720	32	61.5	393	5	US-10-732-923-12430	Sequence 12430, A	793	32	61.5	466	5	US-10-732-923-12183	Sequence 12183, A
721	32	61.5	393	5	US-10-732-923-12548	Sequence 12548, A	794	32	61.5	466	5	US-10-732-923-12580	Sequence 12580, A
722	32	61.5	393	5	US-10-732-923-12605	Sequence 12605, A	795	32	61.5	467	5	US-10-732-923-12791	Sequence 12791, A
723	32	61.5	393	5	US-10-732-923-12611	Sequence 12611, A	796	32	61.5	475	4	US-10-369-493-3491	Sequence 3491, Ap
724	32	61.5	393	5	US-10-732-923-12742	Sequence 12742, A	797	32	61.5	494	4	US-10-043-467-396	Sequence 296, App
725	32	61.5	393	5	US-10-732-923-12770	Sequence 12770, A	798	32	61.5	500	5	US-10-450-763-40348	Sequence 40348, A
726	32	61.5	393	5	US-10-732-923-12771	Sequence 12771, A	799	32	61.5	501	4	US-10-320-797-3228	Sequence 3228, Ap
727	32	61.5	393	5	US-10-732-923-12776	Sequence 12776, A	800	32	61.5	515	4	US-10-425-114-56951	Sequence 56951, A
728	32	61.5	393	5	US-10-732-923-12810	Sequence 12810, A	801	32	61.5	515	4	US-10-425-115-32158	Sequence 32158, A
729	32	61.5	394	5	US-10-732-923-12158	Sequence 12158, A	802	32	61.5	515	5	US-10-491-467-50	Sequence 50, App1
730	32	61.5	394	5	US-10-732-923-12368	Sequence 12368, A	803	32	61.5	525	4	US-10-205-219-17	Sequence 17, App1
731	32	61.5	394	5	US-10-732-923-12371	Sequence 12371, A	804	32	61.5	535	4	US-10-369-493-6143	Sequence 6143, Ap
732	32	61.5	394	5	US-10-732-923-12465	Sequence 12465, A	805	32	61.5	539	4	US-10-369-493-22574	Sequence 22574, A
733	32	61.5	394	5	US-10-732-923-12476	Sequence 12476, A	806	32	61.5	539	4	US-10-408-765A-1767	Sequence 1767, Ap
734	32	61.5	394	5	US-10-732-923-12477	Sequence 12477, A	807	32	61.5	542	4	US-10-289-762-496	Sequence 496, App
735	32	61.5	394	5	US-10-732-923-12479	Sequence 12479, A	808	32	61.5	554	5	US-10-732-923-12766	Sequence 12766, A
736	32	61.5	394	5	US-10-732-923-12484	Sequence 12484, A	809	32	61.5	554	5	US-10-732-923-12790	Sequence 12790, A
737	32	61.5	394	5	US-10-732-923-12488	Sequence 12488, A	810	32	61.5	562	6	US-11-097-143-6534	Sequence 6534, Ap
738	32	61.5	394	5	US-10-732-923-12581	Sequence 12581, A	811	32	61.5	568	6	US-11-097-143-1185	Sequence 1185, Ap
739	32	61.5	394	5	US-10-732-923-12582	Sequence 12582, A	812	32	61.5	570	6	US-11-097-143-10868	Sequence 20868, A
740	32	61.5	394	5	US-10-732-923-12582	Sequence 12582, A	813	32	61.5	577	5	US-10-732-923-12882	Sequence 12882, A
741	32	61.5	394	5	US-10-732-923-12583	Sequence 12583, A	814	32	61.5	577	5	US-10-732-923-12901	Sequence 12901, A
742	32	61.5	394	5	US-10-732-923-12702	Sequence 12702, A	815	32	61.5	578	5	US-10-732-923-12889	Sequence 12889, A
743	32	61.5	394	5	US-10-732-923-12762	Sequence 12762, A	816	32	61.5	584	6	US-11-097-143-30823	Sequence 20823, A
744	32	61.5	394	5	US-10-732-923-12765	Sequence 12765, A	817	32	61.5	613	4	US-10-282-762A-58401	Sequence 58401, A
745	32	61.5	394	5	US-10-732-923-12778	Sequence 12778, A	818	32	61.5	621	4	US-10-289-762-389	Sequence 389, App
746	32	61.5	394	5	US-10-732-923-12779	Sequence 12779, A	819	32	61.5	648	5	US-10-479-764-13	Sequence 13, App1
747	32	61.5	394	5	US-10-732-923-12781	Sequence 12781, A	820	32	61.5	716	4	US-10-732-923-12858	Sequence 12858, A
748	32	61.5	394	5	US-10-732-923-12804	Sequence 12804, A	821	32	61.5	713	5	US-10-424-559-9-17166	Sequence 171766, A
749	32	61.5	394	5	US-10-732-923-12805	Sequence 12805, A	822	32	61.5	728	4	US-10-425-114-45669	Sequence 45669, A
750	32	61.5	394	5	US-10-732-923-12806	Sequence 12806, A	823	32	61.5	736	4	US-10-425-114-52459	Sequence 52459, A
751	32	61.5	394	5	US-10-732-923-12807	Sequence 12807, A	824	32	61.5	752	4	US-10-424-559-9-33554	Sequence 33554, A
752	32	61.5	394	5	US-10-732-923-12808	Sequence 12808, A	825	32	61.5	753	6	US-11-097-143-3669	Sequence 3669, Ap
753	32	61.5	394	5	US-10-732-923-12854	Sequence 12854, A	826	32	61.5	769	6	US-11-097-143-30791	Sequence 10791, Ap
754	32	61.5	394	5	US-10-732-923-12855	Sequence 12855, A	827	32	61.5	827	5	US-10-732-923-12380	Sequence 12380, A
755	32	61.5	395	4	US-10-425-115-20699	Sequence 20699, A	828	32	61.5	817	5	US-10-739-930-1943	Sequence 7943, Ap
756	32	61.5	395	5	US-10-732-923-12154	Sequence 12154, A	829	32	61.5	836	5	US-10-450-763-60187	Sequence 60187, A
757	32	61.5	395	5	US-10-732-923-12173	Sequence 12173, A	830	32	61.5	864	4	US-10-425-115-327121	Sequence 327121, A

831	32	61.5	973	5	US-10-732-923-12820	Sequence 12820, A	904	31	59.6	14	3	US-09-932-613-32	Sequence 32, Appl
832	32	61.5	1039	5	US-10-732-923-12852	Sequence 12852, A	905	31	59.6	14	3	US-09-932-322-22	Sequence 32, Appl
833	32	61.5	1049	5	US-10-732-923-12857	Sequence 12857, A	906	31	59.6	14	3	US-09-932-322-22	Sequence 32, Appl
834	32	61.5	1112	5	US-10-732-923-12839	Sequence 12839, A	907	31	59.6	14	3	US-10-145-206-61	Sequence 31, Appl
835	32	61.5	1115	5	US-10-732-923-12453	Sequence 12453, A	908	31	59.6	17	3	US-09-932-613-451	Sequence 451, App
836	32	61.5	1117	5	US-10-732-923-12819	Sequence 12819, A	909	31	59.6	17	3	US-09-932-322-451	Sequence 451, App
837	32	61.5	1118	5	US-10-732-923-12818	Sequence 12818, A	910	31	59.6	20	4	US-10-145-206-8	Sequence 164, App
838	32	61.5	1118	5	US-10-732-923-12917	Sequence 12917, A	911	31	59.6	25	3	US-09-932-613-164	Sequence 164, App
839	32	61.5	1121	5	US-10-732-923-12829	Sequence 12829, A	912	31	59.6	25	3	US-09-932-322-164	Sequence 164, App
840	32	61.5	1121	5	US-10-732-923-12830	Sequence 12830, A	913	31	59.6	39	4	US-10-767-701-18551	Sequence 48551, App
841	32	61.5	1121	5	US-10-732-923-12842	Sequence 12842, A	914	31	59.6	53	5	US-10-450-763-38364	Sequence 38364, A
842	32	61.5	1121	5	US-10-732-923-12845	Sequence 12845, A	915	31	59.6	57	4	US-10-425-115-350172	Sequence 350172, A
843	32	61.5	1122	5	US-10-732-923-12826	Sequence 12826, A	916	31	59.6	58	4	US-10-424-559-259118	Sequence 259118, A
844	32	61.5	1123	5	US-10-732-923-12825	Sequence 12825, A	917	31	59.6	60	4	US-10-425-115-226288	Sequence 226288, A
845	32	61.5	1124	5	US-10-732-923-12145	Sequence 12145, A	918	31	59.6	60	4	US-10-425-115-226286	Sequence 226286, A
846	32	61.5	1126	5	US-10-732-923-12823	Sequence 12823, A	919	31	59.6	61	4	US-10-437-963-16824	Sequence 16824, A
847	32	61.5	1126	5	US-10-732-923-12828	Sequence 12828, A	920	31	59.6	63	4	US-10-424-559-242719	Sequence 242719, A
848	32	61.5	1126	5	US-10-732-923-12850	Sequence 12850, A	921	31	59.6	65	4	US-10-424-559-226519	Sequence 226519, A
849	32	61.5	1129	5	US-10-732-923-12850	Sequence 12850, A	922	31	59.6	66	4	US-10-424-559-178946	Sequence 178946, A
850	32	61.5	1130	5	US-10-732-923-12849	Sequence 12849, A	923	31	59.6	68	4	US-10-437-963-129269	Sequence 129269, A
851	32	61.5	1130	5	US-10-732-923-12824	Sequence 12824, A	924	31	59.6	69	4	US-10-437-963-129269	Sequence 129269, A
852	32	61.5	1131	5	US-10-732-923-12833	Sequence 12833, A	925	31	59.6	71	4	US-10-082-830-270	Sequence 270, App
853	32	61.5	1131	5	US-10-732-923-12844	Sequence 12844, A	926	31	59.6	73	4	US-10-425-115-228942	Sequence 228942, A
854	32	61.5	1132	5	US-10-732-923-12827	Sequence 12827, A	927	31	59.6	74	4	US-10-425-115-2591002	Sequence 2591002, A
855	32	61.5	1132	5	US-10-732-923-12848	Sequence 12848, A	928	31	59.6	76	4	US-10-425-115-316863	Sequence 316863, A
856	32	61.5	1134	5	US-10-732-923-12848	Sequence 12848, A	929	31	59.6	77	4	US-10-767-701-47431	Sequence 47431, A
857	32	61.5	1135	4	US-10-732-923-12831	Sequence 12831, A	930	31	59.6	78	4	US-10-425-115-300201	Sequence 300201, A
858	32	61.5	1135	4	US-10-767-701-46019	Sequence 46019, A	931	31	59.6	79	4	US-10-425-115-180010	Sequence 180010, A
859	32	61.5	1135	5	US-10-732-923-367	Sequence 367, App	932	31	59.6	79	4	US-10-425-115-222060	Sequence 222060, A
860	32	61.5	1135	5	US-10-732-923-12847	Sequence 12847, A	933	31	59.6	85	5	US-10-473-127-657	Sequence 657, App
861	32	61.5	1135	5	US-10-732-923-12818	Sequence 12918, A	934	31	59.6	87	4	US-10-424-559-216148	Sequence 216148, A
862	32	61.5	1135	5	US-10-732-923-12919	Sequence 12919, A	935	31	59.6	87	4	US-10-437-963-163147	Sequence 163147, A
863	32	61.5	1136	5	US-10-732-923-12913	Sequence 12913, A	936	31	59.6	87	5	US-10-424-559-252523	Sequence 252523, A
864	32	61.5	1137	4	US-10-310-154-552	Sequence 552, App	937	31	59.6	88	4	US-10-739-920-10821	Sequence 10821, A
865	32	61.5	1137	5	US-10-732-923-366	Sequence 366, App	938	31	59.6	88	4	US-10-424-559-264546	Sequence 264546, A
866	32	61.5	1137	5	US-10-732-923-12843	Sequence 12843, A	939	31	59.6	88	4	US-10-425-115-319320	Sequence 319320, A
867	32	61.5	1137	5	US-10-732-923-12846	Sequence 12846, A	940	31	59.6	90	4	US-10-437-963-113319	Sequence 113319, A
868	32	61.5	1137	5	US-10-732-923-12953	Sequence 12953, A	941	31	59.6	94	4	US-10-425-115-246187	Sequence 246187, A
869	32	61.5	1137	5	US-10-732-923-12954	Sequence 12954, A	942	31	59.6	95	4	US-10-424-559-252523	Sequence 252523, A
870	32	61.5	1137	5	US-10-732-923-12955	Sequence 12955, A	943	31	59.6	97	4	US-10-424-559-247073	Sequence 247073, A
871	32	61.5	1139	5	US-10-732-923-12853	Sequence 12853, A	944	31	59.6	98	4	US-10-767-701-58290	Sequence 58290, A
872	32	61.5	1139	5	US-10-732-923-12956	Sequence 12956, A	945	31	59.6	101	4	US-10-425-115-301199	Sequence 301199, A
873	32	61.5	1139	5	US-10-732-923-12817	Sequence 12817, A	946	31	59.6	101	4	US-10-425-115-353896	Sequence 353896, A
874	32	61.5	1142	5	US-10-732-923-12821	Sequence 12821, A	947	31	59.6	102	4	US-10-425-115-296778	Sequence 296778, A
875	32	61.5	1142	5	US-10-732-923-12835	Sequence 12835, A	948	31	59.6	102	4	US-10-425-115-263707	Sequence 263707, A
876	32	61.5	1146	5	US-10-732-923-12841	Sequence 12841, A	949	31	59.6	109	5	US-10-732-923-12931	Sequence 12331, A
877	32	61.5	1151	5	US-10-732-923-12840	Sequence 12840, A	950	31	59.6	110	4	US-10-437-963-151372	Sequence 151372, A
878	32	61.5	1156	5	US-10-732-923-12841	Sequence 12841, A	951	31	59.6	110	4	US-10-425-115-254105	Sequence 254105, A
879	32	61.5	1164	5	US-10-732-923-12837	Sequence 12837, A	952	31	59.6	113	4	US-10-424-559-240911	Sequence 240911, A
880	32	61.5	1164	5	US-10-732-923-12838	Sequence 12838, A	953	31	59.6	115	4	US-10-425-115-305708	Sequence 305708, A
881	32	61.5	1171	4	US-10-310-154-550	Sequence 550, App	954	31	59.6	119	4	US-10-425-115-59417	Sequence 59417, A
882	32	61.5	1171	5	US-10-732-923-364	Sequence 364, App	955	31	59.6	125	4	US-10-424-559-170588	Sequence 170588, A
883	32	61.5	1171	5	US-10-732-923-12904	Sequence 12904, A	956	31	59.6	125	4	US-10-425-114-69026	Sequence 69026, A
884	32	61.5	1171	5	US-10-732-923-12905	Sequence 12905, A	957	31	59.6	127	4	US-10-424-559-222046	Sequence 222046, A
885	32	61.5	1171	5	US-10-732-923-12906	Sequence 12906, A	958	31	59.6	129	4	US-10-425-115-219470	Sequence 219470, A
886	32	61.5	1172	4	US-10-227-035-1	Sequence 1, Appl1	959	31	59.6	129	5	US-10-450-763-32121	Sequence 32121, A
887	32	61.5	1172	4	US-10-732-923-12836	Sequence 12836, A	960	31	59.6	133	5	US-10-732-923-12716	Sequence 12716, A
888	32	61.5	1178	4	US-10-310-154-551	Sequence 551, App	961	31	59.6	134	5	US-10-450-763-56427	Sequence 56427, A
889	32	61.5	1178	4	US-10-732-923-365	Sequence 365, App	962	31	59.6	135	4	US-10-424-559-176216	Sequence 176216, A
890	32	61.5	1178	5	US-10-732-923-12851	Sequence 12851, A	963	31	59.6	136	3	US-09-855-604-32	Sequence 32, Appl1
891	32	61.5	1299	5	US-10-732-923-12900	Sequence 12900, A	964	31	59.6	136	3	US-09-855-604-33	Sequence 39, Appl1
892	32	61.5	1303	5	US-10-732-923-12898	Sequence 12898, A	965	31	59.6	136	3	US-09-855-604-33	Sequence 543, App
893	32	61.5	1305	5	US-10-450-763-57913	Sequence 57913, A	966	31	59.6	136	3	US-09-855-604-39	Sequence 32, Appl1
894	32	61.5	1307	5	US-10-732-923-12899	Sequence 12899, A	967	31	59.6	136	3	US-09-855-604-39	Sequence 39, Appl1
895	32	61.5	1847	6	US-11-097-143-41385	Sequence 41385, A	968	31	59.6	137	5	US-09-855-604-343	Sequence 543, App
896	32	61.5	1850	4	US-10-425-115-357397	Sequence 357397, A	969	31	59.6	138	4	US-10-732-923-12692	Sequence 12692, A
897	32	61.5	2011	4	US-10-437-963-146618	Sequence 146618, A	970	31	59.6	140	4	US-10-071-3704-6	Sequence 6, Appl1
898	32	61.5	19723	4	US-10-084-846A-5	Sequence 5, Appl1	971	31	59.6	141	5	US-10-437-963-1190911	Sequence 190911, A
899	31.5	60.6	48	4	US-10-424-599-238567	Sequence 238567, A	972	31	59.6	144	5	US-10-732-923-12671	Sequence 12671, A
900	31.5	60.6	101	4	US-10-425-115-224434	Sequence 224434, A	973	31	59.6	145	4	US-10-424-559-281015	Sequence 281015, A
901	31.5	60.6	255	4	US-10-437-963-185362	Sequence 185362, A	974	31	59.6	148	6	US-11-021-949-91	Sequence 17, Appl1
902	31.5	60.6	592	4	US-10-425-115-326817	Sequence 326817, A	975	31	59.6	149	5	US-10-732-923-12713	Sequence 12713, A
903	31	59.6	14	3	US-09-932-613-31	Sequence 31, Appl1	976	31	59.6	151	4	US-10-108-260A-2514	Sequence 2514, Ap

```
977 31 59.6 151 4 US-10-425-115-213273 Sequence 21373,
978 31 59.6 151 5 US-10-732-923-12626 Sequence 12626, A
979 31 59.6 151 5 US-10-732-923-12631 Sequence 12631, A
980 31 59.6 152 4 US-10-425-115-352443 Sequence 352443,
981 31 59.6 154 4 US-10-078-929-166 Sequence 166, App
982 31 59.6 154 4 US-10-425-114-70891 Sequence 70891, A
983 31 59.6 154 5 US-10-732-923-126251 Sequence 12625, A
984 31 59.6 155 4 US-10-424-599-250554 Sequence 250554,
985 31 59.6 155 4 US-10-425-115-273668 Sequence 273668,
986 31 59.6 156 5 US-10-732-923-12630 Sequence 12630, A
987 31 59.6 158 4 US-10-071-370A-4 Sequence 4, Appl1
988 31 59.6 158 5 US-10-732-923-12690 Sequence 12690, A
989 31 59.6 158 5 US-10-732-923-12714 Sequence 12714, A
990 31 59.6 158 5 US-10-631-467-1507 Sequence 1507, Ap
991 31 59.6 159 4 US-10-425-115-323734 Sequence 323734,
992 31 59.6 160 5 US-10-732-923-12624 Sequence 12624, A
993 31 59.6 160 5 US-10-732-923-12624 Sequence 12623, A
994 31 59.6 160 5 US-10-732-923-12681 Sequence 12681, A
995 31 59.6 164 3 US-09-855-604-34 Sequence 34, Appl
996 31 59.6 164 3 US-09-855-604-34 Sequence 34, Appl
997 31 59.6 164 4 US-10-425-115-264253 Sequence 264253,
998 31 59.6 165 4 US-10-425-114-44696 Sequence 44696, A
999 31 59.6 165 4 US-10-425-114-47685 Sequence 47685, A
1000 31 59.6 165 4 US-10-425-114-52826 Sequence 52826, A
```

ALIGNMENTS

```
RESULT 1
US-10-484-063-7
; Sequence 7, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILLERMO
; APPLICANT: POLLEN, MICHAEL
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; FILE REFERENCE: UTSC:560US
; CURRENT FILING DATE: 2004-01-16
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-7

Query Match          100.0%; Score 52; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.034;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT FILING DATE: 2003-11-04
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 38
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E6 97-111
US-10-476-570-38

Query Match          100.0%; Score 52; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 3
US-10-476-570-39
; Sequence 39, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: FOUVEILLE-MORATILLE, Sandra
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT FILING DATE: 2003-11-04
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E6 101-115
US-10-476-570-39

Query Match          100.0%; Score 52; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 4
US-10-476-570-35
; Sequence 35, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
```

```
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
TITLE OF INVENTION: papillomavirus proteins and uses thereof
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 35
LENGTH: 20
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E6 91-110
US-10-476-570-35
```

```
Query Match          100.0%; Score 52; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 PLCDLLIRC 9
Db 12 PLCDLLIRC 20
```

```
RESULT 5
US-10-484-063-8
Sequence 8, Application US/10484063
Publication No. US20050048467A1
GENERAL INFORMATION:
APPLICANT: SASTRY, K. JAGANNADHA
APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: FOLLEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
FILE REFERENCE: UTSC:560US
CURRENT APPLICATION NUMBER: US/10/484,063
CURRENT FILING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: PCT/US02/23198
PRIOR FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,809
PRIOR FILING DATE: 2001-07-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 8
LENGTH: 20
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-484-063-8
```

```
Query Match          100.0%; Score 52; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 PLCDLLIRC 9
Db 6 PLCDLLIRC 14
```

```
RESULT 6
US-10-476-570-13
Sequence 13, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
```

```
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
TITLE OF INVENTION: papillomavirus proteins and uses thereof
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 13
LENGTH: 29
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E6 91-119
US-10-476-570-13
```

```
Query Match          100.0%; Score 52; DB 4; Length 29;
Best Local Similarity 100.0%; Pred. No. 0.09;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 PLCDLLIRC 9
Db 12 PLCDLLIRC 20
```

```
RESULT 7
US-10-177-390-6
Sequence 6, Application US/10177390
Publication No. US20030143743A1
GENERAL INFORMATION:
APPLICANT: Schuler, Gerold
APPLICANT: N.V. Antwerp Innovatiecentrum
TITLE OF INVENTION: Improved Transfection of Eucaryotic Cells with Linear
TITLE OF INVENTION: Polynucleotides by Electroporation
FILE REFERENCE: 021505wo/JH/ml
CURRENT APPLICATION NUMBER: US/10/177,390
CURRENT FILING DATE: 2002-06-20
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
LENGTH: 151
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-177-390-6
```

```
Query Match          100.0%; Score 52; DB 4; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.4;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 PLCDLLIRC 9
Db 95 PLCDLLIRC 103
```

```
RESULT 8
US-10-484-063-20
Sequence 20, Application US/10484063
Publication No. US20050048467A1
GENERAL INFORMATION:
APPLICANT: SASTRY, K. JAGANNADHA
APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: FOLLEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
```

```
FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 20
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-20

Query Match          100.0%; Score 52; DB 5; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.4;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 95 PLCDLLIRC 103

RESULT 9
US-10-484-063-27
; Sequence 27, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILTERMO
; APPLICANT: POLLEN, MICHELE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-484-063-27

Query Match          100.0%; Score 52; DB 5; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.4;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 95 PLCDLLIRC 103

RESULT 10
US-10-858-384-2
; Sequence 2, Application US/10858384
; Publication No. US20050033025A1
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCES
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
```

```
CURRENT FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 2
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-858-384-2

Query Match          100.0%; Score 52; DB 5; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.42;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

RESULT 11
US-10-367-057-16
; Sequence 16, Application US/10367057
; Publication No. US20050100554A1
; GENERAL INFORMATION:
; APPLICANT: Cutbilla, Scott;
; APPLICANT: Jackson, Amanda;
; APPLICANT: Lewin, David A.;
; APPLICANT: Ooi, Chean Eng
; TITLE OF INVENTION: Complexes and Methods of Using Same
; FILE REFERENCE: 21402-559
; CURRENT APPLICATION NUMBER: US/10/367,057
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 60/236,911
; PRIOR FILING DATE: 2002-02-14
; NUMBER OF SEQ ID NOS: 198
; SOFTWARE: Curoseqdist version 0.1
; SEQ ID NO 16
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-367-057-16

Query Match          100.0%; Score 52; DB 5; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.42;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

RESULT 12
US-11-021-949-13
; Sequence 13, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEITZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; CURRENT FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/533,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 158
```

TYPE: PRT
ORGANISM: human papilloma virus (HPV)
US-11-021-949-13

Query Match 100.0%; Score 52; DB 6; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.42; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

RESULT 13
US-10-472-724-2
Sequence 2, Application US/10472724
Publication No. US20040171806A1
GENERAL INFORMATION:
APPLICANT: Cid-Arregui, Angel
APPLICANT: Zur Hausen, Harald
TITLE OF INVENTION: Modified HPV E6 and E7 genes and proteins useful for vaccination
FILE REFERENCE: 4121-154
CURRENT APPLICATION NUMBER: US/10/472,724
CURRENT FILING DATE: 2003-09-17
PRIOR APPLICATION NUMBER: PCT/EP02/03271
PRIOR FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: EP 01107271.7
PRIOR FILING DATE: 2001-03-23
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.2
SEQ ID NO 2
LENGTH: 171
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Construct
US-10-472-724-2

Query Match 100.0%; Score 52; DB 4; Length 171;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
Db 107 PLCDLLIRC 115

RESULT 14
US-11-072-288-1
Sequence 1, Application US/11072288
Publication No. US20050159386A1
GENERAL INFORMATION:
APPLICANT: Kienty, Marie-Paule
APPLICANT: BALLOUL, Jean-Marie
APPLICANT: BIZOUARD, Nadine
TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
FILE REFERENCE: 017753-122
CURRENT APPLICATION NUMBER: US/11/072,288
CURRENT FILING DATE: 2005-03-07
PRIOR APPLICATION NUMBER: US/09/462,993
PRIOR FILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: PCT/FR98/01576
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: FR 97/09152
PRIOR FILING DATE: 1997-07-18
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.2
SEQ ID NO 1
LENGTH: 243
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Derived from
OTHER INFORMATION: human papillomavirus, strain HPV-16, E6 protein
OTHER INFORMATION: fused F protein signals, clone B6*TMF.
US-11-072-288-1

Query Match 100.0%; Score 52; DB 6; Length 243;
Best Local Similarity 100.0%; Pred. No. 0.62;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
Db 130 PLCDLLIRC 138

RESULT 15
US-09-367-309A-1
Sequence 1, Application US/09367309A
Publication No. US20020081329A1
GENERAL INFORMATION:
APPLICANT: MACPARLAN, RODERICK I.
APPLICANT: MALIAROS, JTM
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
FILE REFERENCE: 017227/0149
CURRENT APPLICATION NUMBER: US/09/367,309A
CURRENT FILING DATE: 1999-08-11
PRIOR APPLICATION NUMBER: PCT/AU98/00080
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: AU PO 5178
PRIOR FILING DATE: 1997-02-19
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

Query Match 100.0%; Score 52; DB 3; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.67; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

RESULT 16
US-10-000-903-4
Sequence 4, Application US/10000903
Publication No. US20020182221A1
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FaastSeq for Windows Version 3.0
SEQ ID NO 4
LENGTH: 273
TYPE: PRT
ORGANISM: Homo sapien
US-10-000-903-4

Query Match 100.0%; Score 52; DB 4; Length 273;

Best Local Similarity 100.0%; Pred. No. 0.69;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||
Db 208 PLCDLLIRC 216

RESULT 17
US-10-899-771-4
; Sequence 4, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 273
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimaeirc protein (protein D from Haemophilus
; OTHER INFORMATION: influenzae B and E6 from Human papilloma virus type
; OTHER INFORMATION: 16)
US-10-899-771-4

Query Match 100.0%; Score 52; DB 5; Length 273;
Best Local Similarity 100.0%; Pred. No. 0.69;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||
Db 208 PLCDLLIRC 216

RESULT 18
US-10-000-903-10
; Sequence 10, Application US/10000903
; Publication No. US20020182221A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-10

Query Match 100.0%; Score 52; DB 4; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.73;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||
Db 227 PLCDLLIRC 235

RESULT 19
US-10-899-771-10
; Sequence 10, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a Cpg Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimaeirc protein (Clyta from Streptococcus
; OTHER INFORMATION: pneumoniae and E6 from Human papilloma virus type
; OTHER INFORMATION: 16)
US-10-899-771-10

Query Match 100.0%; Score 52; DB 5; Length 292;
Best Local Similarity 100.0%; Pred. No. 0.73;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|||||
Db 227 PLCDLLIRC 235

RESULT 20
US-10-000-903-6
; Sequence 6, Application US/10000903
; Publication No. US20020182221A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-6

Query Match 100.0%; Score 52; DB 4; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.9;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLIRC 9
|||||||
Db 208 PLCDLIRC 216

RESULT 21
US-10-899-771-6
; Sequence 6, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a CpG Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimeric protein (protein D from Haemophilus
; OTHER INFORMATION: influenzae B and B6E7 fusion from Human papilloma
; OTHER INFORMATION: virus type 16)
US-10-899-771-6

Query Match 100.0%; Score 52; DB 5; Length 371;
Best Local Similarity 100.0%; Pred. No. 0.9;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLIRC 9
|||||||
Db 208 PLCDLIRC 216

RESULT 22
US-10-000-903-14
; Sequence 14, Application US/10000903
; Publication No. US2002018222A1
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Bernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/10/000,903
; CURRENT FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 390
; TYPE: PRT
; ORGANISM: Homo sapien

US-10-000-903-14

Query Match 100.0%; Score 52; DB 4; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.95;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLIRC 9
|||||||
Db 227 PLCDLIRC 235

RESULT 23
US-10-899-771-14
; Sequence 14, Application US/10899771
; Publication No. US20050031638A1
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
; TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a CpG Oligonucleotide
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/10/899,771
; CURRENT FILING DATE: 2004-07-27
; PRIOR APPLICATION NUMBER: US/09/581,976
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/08563
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: GB 9727262.9
; PRIOR FILING DATE: 1997-12-24
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 390
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chimeric protein (Clyra from Streptococcus
; OTHER INFORMATION: pneumoniae and B6E7 fusion from Human papilloma
; OTHER INFORMATION: virus type 16)
US-10-899-771-14

Query Match 100.0%; Score 52; DB 5; Length 390;
Best Local Similarity 100.0%; Pred. No. 0.95;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLIRC 9
|||||||
Db 227 PLCDLIRC 235

RESULT 24
US-10-424-599-248871
; Sequence 248871, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 248871
; LENGTH: 100
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_66761C.1.pep
US-10-424-599-248871

Query Match 86.5%; Score 45; DB 4; Length 100;
Best Local Similarity 77.8%; Pred. No. 4.3;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||:|
26 PLCDLTVRC 34

RESULT 25

US-11-021-949-22
; Sequence 22, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; PRIOR FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/532,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 155
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
US-11-021-949-22

Query Match 86.5%; Score 45; DB 6; Length 155;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLLIRC 9
|||||
Db 99 LCDLLIRC 106

RESULT 26

US-11-021-949-18
; Sequence 18, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; PRIOR FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/532,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 149
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
US-11-021-949-18

Query Match 82.7%; Score 43; DB 6; Length 149;
Best Local Similarity 87.5%; Pred. No. 14;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLLIRC 9

Db :|||||
96 ICDLLIRC 103

RESULT 27

US-10-450-763-31975
; Sequence 31975, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; PRIOR FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 31975
; LENGTH: 644
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (336)..(369)
; OTHER INFORMATION: CHORISMATE MUTASE BIOSYNTHESIS C domain identified by
; OTHER INFORMATION: eMATRIX, accession number PD02478, p-value=8.500e-20, raw score 0
; OTHER INFORMATION: p450, E-value=7.1e-05, Pfam score of 20.0
US-10-450-763-31975

Query Match 80.8%; Score 42; DB 5; Length 644;
Best Local Similarity 66.7%; Pred. No. 75;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||:|
Db 267 PLCDRLIRC 275

RESULT 28

US-11-021-949-27
; Sequence 27, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; PRIOR FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/532,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 27
; LENGTH: 150
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
US-11-021-949-27

Query Match 76.9%; Score 40; DB 6; Length 150;
Best Local Similarity 87.5%; Pred. No. 44;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDDLIRC 9
|||:||||
Db 96 LCDDLIRC 103

RESULT 29
US-11-021-949-26
; Sequence 26, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LI, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SAMIENTO, CHAMORRO SONOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; CURRENT FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/532,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 26
; LENGTH: 151
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
US-11-021-949-26

Query Match 76.9%; Score 40; DB 6; Length 151;
Best Local Similarity 87.5%; Pred. No. 44;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDDLIRC 9
|||:||||
Db 96 LCDDLIRC 103

RESULT 30
US-10-425-115-309527
; Sequence 309527, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 309527
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_45351C.1.pep
US-10-425-115-309527

Query Match 76.0%; Score 39.5; DB 4; Length 318;
Best Local Similarity 80.0%; Pred. No. 1.1e+02;
Matches 8; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

QY 1 PLCDLILIRC 9
|||:||||
Db 148 PLCDLILIRC 157

RESULT 31
US-10-732-923-12468
; Sequence 12468, Application US/10732923
; Publication No. US20050108791A1
; GENERAL INFORMATION:
; APPLICANT: Edgerton, Michael D
; TITLE OF INVENTION: TRANSGENIC PLANTS WITH IMPROVED PHENOTYPES
; FILE REFERENCE: 38-15(52796)C
; CURRENT APPLICATION NUMBER: US/10/732,923
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: 10/310,154
; PRIOR FILING DATE: 2002-12-04
; NUMBER OF SEQ ID NOS: 24149
; SEQ ID NO 12468
; LENGTH: 190
; TYPE: PRT
; ORGANISM: Tmesipteris tannensis
US-10-732-923-12468

Query Match 75.0%; Score 39; DB 5; Length 190;
Best Local Similarity 75.0%; Pred. No. 81;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLILIRC 8
|||:||||
Db 170 PLCDLILIRC 177

RESULT 32
US-10-732-923-12757
; Sequence 12757, Application US/10732923
; Publication No. US20050108791A1
; GENERAL INFORMATION:
; APPLICANT: Edgerton, Michael D
; TITLE OF INVENTION: TRANSGENIC PLANTS WITH IMPROVED PHENOTYPES
; FILE REFERENCE: 38-15(52796)C
; CURRENT APPLICATION NUMBER: US/10/732,923
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: 10/310,154
; PRIOR FILING DATE: 2002-12-04
; NUMBER OF SEQ ID NOS: 24149
; SEQ ID NO 12757
; LENGTH: 190
; TYPE: PRT
; ORGANISM: Huperzia selago
US-10-732-923-12757

Query Match 75.0%; Score 39; DB 5; Length 190;
Best Local Similarity 75.0%; Pred. No. 81;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLILIRC 8
|||:||||
Db 170 PLCDLILIRC 177

RESULT 33
US-10-485-710-135
; Sequence 135, Application US/10485710
; Publication No. US20050064563A1
; GENERAL INFORMATION:
; APPLICANT: HEIDE, LUTZ
; APPLICANT: LI, SHU-MING
; TITLE OF INVENTION: NUCLEIC ACIDS FOR AMINOOCUMARIN BIOSYNTHESIS
; FILE REFERENCE: 079612
; CURRENT APPLICATION NUMBER: US/10/485,710
; CURRENT FILING DATE: 2004-02-04
; PRIOR APPLICATION NUMBER: PCT/EP02/08777
; PRIOR FILING DATE: 2002-08-06
; PRIOR APPLICATION NUMBER: 60/310,808
; PRIOR FILING DATE: 2001-08-08

NUMBER OF SEQ ID NOS: 145
SOFTWARE: Patentn Ver. 3.2
SEQ ID NO: 135
LENGTH: 379
TYPE: PRT
ORGANISM: Streptomyces spheroides
US-10-485-710-135

Query Match 75.0%; Score 39; DB 5; Length 379;
Best Local Similarity 77.8%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
Db 267 PLCDLPTC 275

RESULT 34
US-10-485-710-94
Sequence 94, Application US/10485710
Publication No. US20050064563A1
GENERAL INFORMATION:
APPLICANT: HEIDE, LUTZ
APPLICANT: LI, SHU-MING
TITLE OF INVENTION: NUCLEIC ACIDS FOR AMINOCUMARIN BIOSYNTHESIS
FILE REFERENCE: Q79612
CURRENT APPLICATION NUMBER: US/10/485,710
CURRENT FILING DATE: 2004-02-04
PRIOR APPLICATION NUMBER: PCT/EP02/08777
PRIOR FILING DATE: 2002-08-06
PRIOR APPLICATION NUMBER: 60/310,808
PRIOR FILING DATE: 2001-08-08
NUMBER OF SEQ ID NOS: 145
SOFTWARE: Patentn Ver. 3.2
SEQ ID NO 94
LENGTH: 390
TYPE: PRT
ORGANISM: Streptomyces roseochromogenes
US-10-485-710-94

Query Match 75.0%; Score 39; DB 5; Length 390;
Best Local Similarity 77.8%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
Db 267 PLCDLPTC 275

RESULT 35
US-10-485-710-21
Sequence 21, Application US/10485710
Publication No. US20050064563A1
GENERAL INFORMATION:
APPLICANT: HEIDE, LUTZ
APPLICANT: LI, SHU-MING
TITLE OF INVENTION: NUCLEIC ACIDS FOR AMINOCUMARIN BIOSYNTHESIS
FILE REFERENCE: Q79612
CURRENT APPLICATION NUMBER: US/10/485,710
CURRENT FILING DATE: 2004-02-04
PRIOR APPLICATION NUMBER: PCT/EP02/08777
PRIOR FILING DATE: 2002-08-06
PRIOR APPLICATION NUMBER: 60/310,808
PRIOR FILING DATE: 2001-08-08
NUMBER OF SEQ ID NOS: 145
SOFTWARE: Patentn Ver. 3.2
SEQ ID NO 21
LENGTH: 402
TYPE: PRT
ORGANISM: Streptomyces rishiriensis
US-10-485-710-21

Query Match 75.0%; Score 39; DB 5; Length 402;

Best Local Similarity 77.8%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
Db 278 PLCDLPTC 286

RESULT 36
US-10-485-710-53
Sequence 53, Application US/10485710
Publication No. US20050064563A1
GENERAL INFORMATION:
APPLICANT: HEIDE, LUTZ
APPLICANT: LI, SHU-MING
TITLE OF INVENTION: NUCLEIC ACIDS FOR AMINOCUMARIN BIOSYNTHESIS
FILE REFERENCE: Q79612
CURRENT APPLICATION NUMBER: US/10/485,710
CURRENT FILING DATE: 2004-02-04
PRIOR APPLICATION NUMBER: PCT/EP02/08777
PRIOR FILING DATE: 2002-08-06
PRIOR APPLICATION NUMBER: 60/310,808
PRIOR FILING DATE: 2001-08-08
NUMBER OF SEQ ID NOS: 145
SOFTWARE: Patentn Ver. 3.2
SEQ ID NO 53
LENGTH: 402
TYPE: PRT
ORGANISM: Streptomyces rishiriensis
US-10-485-710-53

Query Match 75.0%; Score 39; DB 5; Length 402;
Best Local Similarity 77.8%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
Db 278 PLCDLPTC 286

RESULT 37
US-10-476-570-55
Sequence 55, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
TITLE OF INVENTION: papillomavirus proteins and uses thereof
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: Patentn Ver. 2.1
SEQ ID NO 55
LENGTH: 29
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E6 80-108
US-10-476-570-55

Query Match 73.1%; Score 38; DB 4; Length 29;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLI 7
|:|||||
Db 23 PLCDLLI 29

RESULT 38
US-10-858-384-8
; Sequence 8, Application US/10858384
; Publication No. US20050033025A1
; GENERAL INFORMATION:
; APPLICANT: CHOEPIN, JEANINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; CURRENT FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 8
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of the Artificial Sequence: Peptide fragment
US-10-858-384-8

Query Match 73.1%; Score 38; DB 5; Length 29;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLI 7
|:|||||
Db 23 PLCDLLI 29

RESULT 39
US-10-425-115-269200
; Sequence 269200, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalick, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 269200
; LENGTH: 55
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRF4577_177108C.1.pep
US-10-425-115-269200

Query Match 73.1%; Score 38; DB 4; Length 55;
Best Local Similarity 66.7%; Pred. No. 39;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
|:|||||

Db 21 PICDALLRC 29

RESULT 40
US-11-021-949-19
; Sequence 19, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; CURRENT FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/532,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 148
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
US-11-021-949-19

Query Match 73.1%; Score 38; DB 6; Length 148;
Best Local Similarity 75.0%; Pred. No. 96;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLLIRC 9
|:|||||
Db 97 LCDLLIRC 104

RESULT 41
US-11-021-949-359
; Sequence 359, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; TITLE OF INVENTION: AND METHODS OF THEIR USE
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; CURRENT FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/532,373
; PRIOR FILING DATE: 2003-12-23
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 359
; LENGTH: 148
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
US-11-021-949-359

Query Match 73.1%; Score 38; DB 6; Length 148;
Best Local Similarity 75.0%; Pred. No. 96;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLLIRC 9
|:|||||
Db 97 LCDLLIRC 104

RESULT 42
US-11-021-949-14

```
; Sequence 14, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
; APPLICANT: BELMARES, MICHAEL P.
; APPLICANT: DIAZ-SARMIENTO, CHAMORRO SOMOZA
; APPLICANT: SCHWEIZER, JOHANNES
; TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
; FILE REFERENCE: VITA-012
; CURRENT APPLICATION NUMBER: US/11/021,949
; PRIOR FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: 60/533,373
; NUMBER OF SEQ ID NOS: 361
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 149
; TYPE: PRT
; ORGANISM: human papilloma virus (HPV)
; US-11-021-949-14

Query Match      73.1%; Score 38; DB 6; Length 149;
Best Local Similarity 87.5%; Pred. No. 96;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

QY 2 LCDLLIRC 9
Db 96 LCHLLIRC 103

```
RESULT 43
US-10-425-114-46825
; Sequence 46825, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Lin, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(5313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 46825
; LENGTH: 154
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: 701062335_FLI.pep
; US-10-425-114-46825

Query Match      73.1%; Score 38; DB 4; Length 154;
Best Local Similarity 100.0%; Pred. No. 99;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 PLCDLLI 7
Db 40 PLCDLLI 46

```
RESULT 44
US-10-437-963-107183
; Sequence 107183, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Kovalic, David K.
```

```
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(5322)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 107183
; LENGTH: 367
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_1155C.1.pep
; US-10-437-963-107183

Query Match      73.1%; Score 38; DB 4; Length 367;
Best Local Similarity 66.7%; Pred. No. 2,2e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

QY 1 PLCDLLIRC 9
Db 53 PLCEALCRC 61

```
RESULT 45
US-10-437-963-177292
; Sequence 177292, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(5322)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 177292
; LENGTH: 526
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_74959C.1.pep
; US-10-437-963-177292

Query Match      73.1%; Score 38; DB 4; Length 526;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 PLCDLLI 7
Db 416 PLCDLLI 422

```
RESULT 46
US-10-424-599-205535
; Sequence 205535, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou Yihua
```

```
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 205535
LENGTH: 532
TYPE: PRT
ORGANISM: Glycine max
FEATURE:
OTHER INFORMATION: Clone ID: PAT_MRT3847_27626C.1.pep
US-10-424-599-205535

Query Match
Best Local Similarity 73.1%; Score 38; DB 4; Length 532;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLI 7
Db 418 PLCDLLI 424

RESULT 47
US-10-424-599-178710
Sequence 178710, Application US/10424599
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 178710
LENGTH: 539
TYPE: PRT
ORGANISM: Glycine max
FEATURE:
OTHER INFORMATION: Clone ID: PAT_MRT3847_132392C.1.pep
US-10-424-599-178710

Query Match
Best Local Similarity 73.1%; Score 38; DB 4; Length 539;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLI 7
Db 425 PLCDLLI 431

RESULT 48
US-11-097-143-3294
Sequence 3294, Application US/11097143
Publication No. US20050208558A1
GENERAL INFORMATION:
APPLICANT: Venter, J. Craig
APPLICANT: et al.
TITLE OF INVENTION: DETECTION KIT, SUCH AS NUCLEIC ACID
TITLE OF INVENTION: ARRAYS, FOR DETECTING EXPRESSION OF 10,000 OR MORE
FILE REFERENCE: CL000728
CURRENT APPLICATION NUMBER: US/11/097,143
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: 60/157,832
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: 60/160,191
PRIOR FILING DATE: 1999-10-19
```

```
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR FILING DATE: 1999-10-28
PRIOR APPLICATION NUMBER: 60/164,769
PRIOR FILING DATE: 1999-11-12
PRIOR APPLICATION NUMBER: 60/173,383
PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: 60/175,693
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: 60/184,831
PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: 60/191,637
PRIOR FILING DATE: 2000-03-23
NUMBER OF SEQ ID NOS: 43008
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 3294
LENGTH: 594
TYPE: PRT
ORGANISM: DROSOPHILA
US-11-097-143-3294

Query Match
Best Local Similarity 73.1%; Score 38; DB 6; Length 594;
Best Local Similarity 55.6%; Pred. No. 3.4e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
Db 126 PLCDLLIRC 134

RESULT 49
US-10-094-749-3022
Sequence 3022, Application US/10094749
Publication No. US20030219741A1
GENERAL INFORMATION:
APPLICANT: ISOGAI, TAKAO
APPLICANT: SUGIYAMA, TOMOYASU
APPLICANT: OTSUKI, TETSUJI
APPLICANT: WAKAMATSU AI
APPLICANT: SATO, HIROYUKI
APPLICANT: ISHII, SHIZUKO
APPLICANT: YAMAMOTO, JUN-ICHI
APPLICANT: ISONO, YUUKO
APPLICANT: HIO, YURI
APPLICANT: OTSUKA, KAORU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: SEKI, NAOHIKO
APPLICANT: OTSUKA, MOTOTYUKI
APPLICANT: YOSHITAKA, TSUTOMU
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 08435/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/350,435
PRIOR FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3022
LENGTH: 701
TYPE: PRT
ORGANISM: Homo sapiens
US-10-094-749-3022

Query Match
Best Local Similarity 73.1%; Score 38; DB 4; Length 701;
Best Local Similarity 77.8%; Pred. No. 3.9e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

Db 469 PLCDLIRRC 477

```

RESULT 50
US-10-450-763-50436
; Sequence 50436, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hysed, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 50436
; LENGTH: 2645
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (1056)..(1077)
; OTHER INFORMATION: Somatomedin B domain proteins domain identified by eMATRIX.
; OTHER INFORMATION: accession number BL00524A, p-value=4.282e-09, raw score of 9.65
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (321)..(2604)
; OTHER INFORMATION: TPR Domain domain identified by Pfam, accession name TPR, E-
; OTHER INFORMATION: value=6.3e-39, Pfam score of 142.8
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(2645)
; OTHER INFORMATION: Xaa = X or * as defined in Table 2
US-10-450-763-50436

```

Query Match 73.1%; Score 38; DB 5; Length 2645;

Best Local Similarity 77.8%; Pred. No. 1.3e+03;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 PLCDLIRRC 9

Db 682 PLCDLIRRC 690

Search completed: May 5, 2006, 07:44:28
Job time : 76.2 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 07:32:07 ; Search time 18.4 Seconds
(without alignments)
22.639 Million cell updates/sec

Title: US-08-170-344-12
Perfect score: 52
Sequence: 1 PLCDLIRC 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published Applications_AA_New:*

- 1: /SIDSS/prodata/1/pubppa/US08_NEW_PUB.pep1:*
- 2: /SIDSS/prodata/1/pubppa/US06_NEW_PUB.pep:*
- 3: /SIDSS/prodata/1/pubppa/US07_NEW_PUB.pep:*
- 4: /SIDSS/prodata/1/pubppa/US08_NEW_PUB.pep:*
- 5: /SIDSS/prodata/1/pubppa/PCT_NEW_PUB.pep:*
- 6: /SIDSS/prodata/1/pubppa/US09_NEW_PUB.pep:*
- 7: /SIDSS/prodata/1/pubppa/US09_NEW_PUB.pep1:*
- 8: /SIDSS/prodata/1/pubppa/US10_NEW_PUB.pep:*
- 9: /SIDSS/prodata/1/pubppa/US11_NEW_PUB.pep1:*
- 10: /SIDSS/prodata/1/pubppa/US11_NEW_PUB.pep:*
- 11: /SIDSS/prodata/1/pubppa/US11_NEW_PUB.pep1:*
- 12: /SIDSS/prodata/1/pubppa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	52	100.0	151	9	US-10-530-253-13
2	52	100.0	158	11	US-11-206-138-3
3	52	100.0	248	9	US-10-530-253-1
4	52	100.0	248	9	US-10-530-253-3
5	52	100.0	248	9	US-10-530-253-5
6	52	100.0	248	9	US-10-530-253-7
7	52	100.0	248	9	US-10-530-253-9
8	52	100.0	248	9	US-10-530-253-11
9	52	100.0	256	11	US-11-192-923A-2
10	45	86.5	11	9	US-10-530-061-497
11	45	86.5	155	9	US-10-530-253-23
12	43	82.7	149	9	US-10-530-253-16
13	42	80.8	838	11	US-11-096-568A-32096
14	42	80.8	917	11	US-11-096-568A-32095
15	42	80.8	949	11	US-11-096-568A-32094
16	38	73.1	11	9	US-10-530-061-782
17	38	73.1	149	9	US-10-530-253-18
18	36	69.2	9	9	US-10-530-061-642
19	36	69.2	160	9	US-10-530-253-25
20	35	67.3	9	9	US-10-530-061-75
21	35	67.3	9	9	US-10-530-061-126

22	67.3	183	11	US-11-079-463-10174	Sequence 10174, A
23	67.3	225	11	US-11-087-099-11058	Sequence 11058, A
24	67.3	407	11	US-11-072-512-3074	Sequence 3074, Ap
25	67.3	550	11	US-11-188-298-13965	Sequence 13965, A
26	67.3	558	11	US-11-188-298-9296	Sequence 9296, Ap
27	67.3	558	11	US-11-188-298-11552	Sequence 11552, A
28	65.4	149	9	US-10-530-061-1680	Sequence 1680, Ap
29	65.4	159	9	US-10-530-253-17	Sequence 17, Appl
30	65.4	211	11	US-11-098-686-11255	Sequence 11255, A
31	65.4	321	11	US-11-087-099-8723	Sequence 8723, A
32	65.4	392	11	US-11-087-099-8723	Sequence 8723, Ap
33	65.4	393	11	US-11-087-099-784	Sequence 11887, A
34	65.4	394	11	US-11-087-099-11887	Sequence 2810, Ap
35	65.4	795	11	US-11-072-512-2810	Sequence 643, App
36	63.5	9	9	US-10-530-061-643	Sequence 4940, Ap
37	63.5	282	11	US-11-188-298-4940	Sequence 54, Appl
38	63.5	350	11	US-11-087-528-54	Sequence 14421, A
39	63.5	393	11	US-11-087-099-12421	Sequence 12016, A
40	63.5	1129	11	US-11-087-099-12016	Sequence 1116, Ap
41	63.5	5405	11	US-11-108-172-1116	Sequence 484, App
42	61.5	11	9	US-10-530-061-484	Sequence 389, App
43	61.5	29	11	US-11-144-947-389	Sequence 39, Appl
44	61.5	152	9	US-10-530-253-39	Sequence 2077, Ap
45	61.5	167	11	US-11-072-512-2077	Sequence 3371, Ap
46	61.5	188	11	US-11-087-099-3371	Sequence 9142, Ap
47	61.5	193	11	US-11-087-099-9142	Sequence 13496, A
48	61.5	217	11	US-11-096-568A-13496	Sequence 22356, A
49	61.5	227	11	US-11-096-568A-22356	Sequence 13495, A
50	61.5	245	11	US-11-087-099-1154	Sequence 1154, Ap
51	61.5	245	11	US-11-087-099-1640	Sequence 1640, Ap
52	61.5	245	11	US-11-087-099-2088	Sequence 2088, Ap
53	61.5	245	11	US-11-087-099-2890	Sequence 2890, Ap
54	61.5	245	11	US-11-087-099-3018	Sequence 3018, Ap
55	61.5	245	11	US-11-087-099-3441	Sequence 3441, Ap
56	61.5	245	11	US-11-087-099-4401	Sequence 4401, Ap
57	61.5	245	11	US-11-087-099-4934	Sequence 4934, Ap
58	61.5	245	11	US-11-087-099-5134	Sequence 5134, Ap
59	61.5	245	11	US-11-087-099-5141	Sequence 5141, Ap
60	61.5	245	11	US-11-087-099-5585	Sequence 5585, Ap
61	61.5	245	11	US-11-087-099-6186	Sequence 6186, Ap
62	61.5	245	11	US-11-087-099-6348	Sequence 6348, Ap
63	61.5	245	11	US-11-087-099-6442	Sequence 6442, Ap
64	61.5	245	11	US-11-087-099-6551	Sequence 6551, Ap
65	61.5	245	11	US-11-087-099-7214	Sequence 7214, Ap
66	61.5	245	11	US-11-087-099-8322	Sequence 8322, Ap
67	61.5	245	11	US-11-087-099-9726	Sequence 9726, Ap
68	61.5	245	11	US-11-087-099-9780	Sequence 9780, Ap
69	61.5	245	11	US-11-087-099-9935	Sequence 9935, Ap
70	61.5	245	11	US-11-087-099-10421	Sequence 10421, A
71	61.5	245	11	US-11-087-099-10438	Sequence 10438, A
72	61.5	245	11	US-11-087-099-10577	Sequence 10577, A
73	61.5	245	11	US-11-087-099-11770	Sequence 11770, A
74	61.5	245	11	US-11-087-099-11795	Sequence 11795, A
75	61.5	256	11	US-11-087-099-13494	Sequence 13494, A
76	61.5	256	11	US-11-096-568A-13494	Sequence 5499, Ap
77	61.5	267	11	US-11-096-568A-22355	Sequence 22355, A
78	61.5	270	11	US-11-096-568A-18901	Sequence 18901, A
79	61.5	281	11	US-11-096-568A-16727	Sequence 16727, A
80	61.5	292	11	US-11-096-568A-8551	Sequence 8551, Ap
81	61.5	295	11	US-10-504-120-28	Sequence 28, Appl
82	61.5	309	8	US-10-504-120-29	Sequence 29, Appl
83	61.5	309	8	US-11-109-156-24	Sequence 24, Appl
84	61.5	309	11	US-11-109-156-39	Sequence 39, Appl
85	61.5	309	11	US-11-087-099-7838	Sequence 7838, Ap
86	61.5	309	11	US-11-096-568A-22995	Sequence 22985, A
87	61.5	310	11	US-11-096-568A-22984	Sequence 22984, A
88	61.5	313	11	US-11-087-099-9832	Sequence 9832, Ap
89	61.5	314	11	US-11-087-099-9832	Sequence 16726, Ap
90	61.5	315	11	US-11-087-099-8850	Sequence 8850, Ap
91	61.5	323	11	US-11-087-099-11459	Sequence 11459, A
92	61.5	332	11	US-11-087-099-3340	Sequence 3340, Ap
93	61.5	333	11	US-11-087-099-3840	Sequence 3840, Ap
94	61.5	333	11	US-11-087-099-3840	Sequence 3840, Ap

95	32	61.5	341	11	US-11-087-099-1204	Sequence 1204, Ap	168	32	61.5	374	11	US-11-087-099-8987	Sequence 8987, Ap
96	32	61.5	341	11	US-11-087-099-5868	Sequence 5868, Ap	169	32	61.5	374	11	US-11-087-099-9371	Sequence 9371, Ap
97	32	61.5	341	11	US-11-087-099-9649	Sequence 9649, Ap	170	32	61.5	374	11	US-11-087-099-10066	Sequence 10066, A
98	32	61.5	345	11	US-11-087-099-10622	Sequence 10622, A	171	32	61.5	374	11	US-11-087-099-10153	Sequence 10153, A
99	32	61.5	352	11	US-11-087-099-10353	Sequence 10353, A	172	32	61.5	374	11	US-11-087-099-10890	Sequence 10890, A
100	32	61.5	353	11	US-11-087-099-3620	Sequence 3620, Ap	173	32	61.5	374	11	US-11-087-099-10934	Sequence 10934, A
101	32	61.5	353	11	US-11-096-568A-16725	Sequence 16725, A	174	32	61.5	374	11	US-11-087-099-12216	Sequence 12216, A
102	32	61.5	353	11	US-11-079-463-6821	Sequence 6821, Ap	175	32	61.5	374	11	US-11-087-099-12416	Sequence 12416, A
103	32	61.5	356	11	US-11-087-099-10081	Sequence 10081, A	176	32	61.5	376	11	US-11-087-099-610	Sequence 610, App
104	32	61.5	358	11	US-11-087-099-3961	Sequence 3961, Ap	177	32	61.5	376	11	US-11-087-099-1227	Sequence 1227, Ap
105	32	61.5	358	11	US-11-087-099-8108	Sequence 8108, Ap	178	32	61.5	376	11	US-11-087-099-2376	Sequence 2376, Ap
106	32	61.5	358	11	US-11-087-099-8360	Sequence 8360, Ap	179	32	61.5	376	11	US-11-087-099-2690	Sequence 2690, Ap
107	32	61.5	358	11	US-11-087-099-11545	Sequence 11545, A	180	32	61.5	376	11	US-11-087-099-3519	Sequence 3519, Ap
108	32	61.5	360	11	US-11-087-099-6924	Sequence 6924, Ap	181	32	61.5	376	11	US-11-087-099-4509	Sequence 4509, Ap
109	32	61.5	360	11	US-11-087-099-9427	Sequence 9427, Ap	182	32	61.5	376	11	US-11-087-099-4509	Sequence 4509, Ap
110	32	61.5	360	11	US-11-087-099-12207	Sequence 12207, A	183	32	61.5	376	11	US-11-087-099-5255	Sequence 5255, Ap
111	32	61.5	361	11	US-11-087-099-2400	Sequence 2400, Ap	184	32	61.5	376	11	US-11-087-099-5666	Sequence 5666, Ap
112	32	61.5	361	11	US-11-087-099-3244	Sequence 3244, Ap	185	32	61.5	376	11	US-11-087-099-5985	Sequence 5985, Ap
113	32	61.5	361	11	US-11-087-099-5289	Sequence 5289, Ap	186	32	61.5	376	11	US-11-087-099-6806	Sequence 6806, Ap
114	32	61.5	361	11	US-11-087-099-8751	Sequence 8751, Ap	187	32	61.5	376	11	US-11-087-099-7098	Sequence 7098, Ap
115	32	61.5	361	11	US-11-087-099-12319	Sequence 12319, A	188	32	61.5	376	11	US-11-087-099-7105	Sequence 7105, Ap
116	32	61.5	362	11	US-11-087-099-3548	Sequence 3548, Ap	189	32	61.5	376	11	US-11-087-099-9340	Sequence 9340, Ap
117	32	61.5	362	11	US-11-087-099-8650	Sequence 8650, Ap	190	32	61.5	376	11	US-11-087-099-9340	Sequence 9340, Ap
118	32	61.5	363	11	US-11-087-099-3298	Sequence 3298, Ap	191	32	61.5	380	11	US-11-087-099-6531	Sequence 6531, A
119	32	61.5	363	11	US-11-087-099-7293	Sequence 7293, Ap	192	32	61.5	381	11	US-11-087-099-2293	Sequence 2293, Ap
120	32	61.5	363	11	US-11-087-099-9077	Sequence 9077, Ap	193	32	61.5	382	11	US-11-087-099-11220	Sequence 11220, A
121	32	61.5	363	11	US-11-087-099-11037	Sequence 11037, A	194	32	61.5	384	11	US-11-087-099-2073	Sequence 2073, Ap
122	32	61.5	363	11	US-11-087-099-11102	Sequence 11102, A	195	32	61.5	384	11	US-11-087-099-2682	Sequence 2682, Ap
123	32	61.5	363	11	US-11-087-099-11978	Sequence 11978, A	196	32	61.5	385	11	US-11-087-099-7112	Sequence 7112, Ap
124	32	61.5	364	11	US-11-087-099-1446	Sequence 1446, A	197	32	61.5	386	11	US-11-087-099-6432	Sequence 6432, Ap
125	32	61.5	364	11	US-11-087-099-3540	Sequence 3540, Ap	198	32	61.5	387	11	US-11-087-099-6047	Sequence 6047, Ap
126	32	61.5	364	11	US-11-087-099-5475	Sequence 5475, Ap	199	32	61.5	388	11	US-11-087-099-4385	Sequence 4385, Ap
127	32	61.5	364	11	US-11-087-099-5588	Sequence 5588, Ap	200	32	61.5	388	11	US-11-087-099-9225	Sequence 9225, Ap
128	32	61.5	364	11	US-11-087-099-7460	Sequence 7460, Ap	201	32	61.5	390	11	US-11-087-099-646	Sequence 646, App
129	32	61.5	364	11	US-11-087-099-10160	Sequence 10160, A	202	32	61.5	390	11	US-11-087-099-5633	Sequence 5633, Ap
130	32	61.5	365	11	US-11-087-099-1867	Sequence 1867, A	203	32	61.5	390	11	US-11-087-099-7953	Sequence 7953, Ap
131	32	61.5	365	11	US-11-087-099-10157	Sequence 10157, A	204	32	61.5	390	11	US-11-087-099-11040	Sequence 11040, A
132	32	61.5	365	11	US-11-087-099-10674	Sequence 10674, A	205	32	61.5	391	11	US-11-087-099-1537	Sequence 1537, Ap
133	32	61.5	365	11	US-11-087-099-11890	Sequence 11890, A	206	32	61.5	391	11	US-11-087-099-3630	Sequence 3630, Ap
134	32	61.5	368	11	US-11-087-099-8423	Sequence 8423, A	207	32	61.5	391	11	US-11-087-099-4105	Sequence 4105, Ap
135	32	61.5	369	11	US-11-087-099-4654	Sequence 4654, Ap	208	32	61.5	391	11	US-11-087-099-4197	Sequence 4197, Ap
136	32	61.5	370	11	US-11-096-568A-22883	Sequence 22883, A	209	32	61.5	391	11	US-11-087-099-4808	Sequence 4808, Ap
137	32	61.5	370	11	US-11-087-099-4748	Sequence 4748, Ap	210	32	61.5	391	11	US-11-087-099-6831	Sequence 6831, Ap
138	32	61.5	371	11	US-11-087-099-628	Sequence 628, App	211	32	61.5	391	11	US-11-087-099-11571	Sequence 11571, A
139	32	61.5	371	11	US-11-087-099-8703	Sequence 8703, Ap	212	32	61.5	392	11	US-11-087-099-683	Sequence 683, App
140	32	61.5	373	11	US-11-087-099-8553	Sequence 8553, Ap	213	32	61.5	392	11	US-11-087-099-713	Sequence 713, App
141	32	61.5	373	11	US-11-087-099-12076	Sequence 12076, A	214	32	61.5	392	11	US-11-087-099-774	Sequence 774, App
142	32	61.5	374	11	US-11-087-099-1345	Sequence 1345, Ap	215	32	61.5	392	11	US-11-087-099-862	Sequence 862, App
143	32	61.5	374	11	US-11-087-099-1345	Sequence 1345, Ap	216	32	61.5	392	11	US-11-087-099-870	Sequence 870, App
144	32	61.5	374	11	US-11-087-099-1354	Sequence 1354, Ap	217	32	61.5	392	11	US-11-087-099-884	Sequence 884, App
145	32	61.5	374	11	US-11-087-099-9284	Sequence 9284, Ap	218	32	61.5	392	11	US-11-087-099-1010	Sequence 1010, Ap
146	32	61.5	374	11	US-11-087-099-2403	Sequence 2403, Ap	219	32	61.5	392	11	US-11-087-099-1122	Sequence 1122, Ap
147	32	61.5	374	11	US-11-087-099-2515	Sequence 2515, Ap	220	32	61.5	392	11	US-11-087-099-1157	Sequence 1157, Ap
148	32	61.5	374	11	US-11-087-099-2800	Sequence 2800, Ap	221	32	61.5	392	11	US-11-087-099-1540	Sequence 1540, Ap
149	32	61.5	374	11	US-11-087-099-3644	Sequence 3644, Ap	222	32	61.5	392	11	US-11-087-099-1690	Sequence 1690, Ap
150	32	61.5	374	11	US-11-087-099-3860	Sequence 3860, Ap	223	32	61.5	392	11	US-11-087-099-1912	Sequence 1912, Ap
151	32	61.5	374	11	US-11-087-099-4128	Sequence 4128, Ap	224	32	61.5	392	11	US-11-087-099-1928	Sequence 1928, Ap
152	32	61.5	374	11	US-11-087-099-4312	Sequence 4312, Ap	225	32	61.5	392	11	US-11-087-099-2084	Sequence 2084, Ap
153	32	61.5	374	11	US-11-087-099-4403	Sequence 4403, Ap	226	32	61.5	392	11	US-11-087-099-2178	Sequence 2178, Ap
154	32	61.5	374	11	US-11-087-099-5801	Sequence 5801, Ap	227	32	61.5	392	11	US-11-087-099-2235	Sequence 2235, Ap
155	32	61.5	374	11	US-11-087-099-6091	Sequence 6091, Ap	228	32	61.5	392	11	US-11-087-099-2767	Sequence 2767, Ap
156	32	61.5	374	11	US-11-087-099-6183	Sequence 6183, Ap	229	32	61.5	392	11	US-11-087-099-2863	Sequence 2863, Ap
157	32	61.5	374	11	US-11-087-099-6290	Sequence 6290, Ap	230	32	61.5	392	11	US-11-087-099-3004	Sequence 3004, Ap
158	32	61.5	374	11	US-11-087-099-6628	Sequence 6628, Ap	231	32	61.5	392	11	US-11-087-099-3142	Sequence 3142, Ap
159	32	61.5	374	11	US-11-087-099-6834	Sequence 6834, Ap	232	32	61.5	392	11	US-11-087-099-3260	Sequence 3260, Ap
160	32	61.5	374	11	US-11-087-099-6930	Sequence 6930, Ap	233	32	61.5	392	11	US-11-087-099-3350	Sequence 3350, Ap
161	32	61.5	374	11	US-11-087-099-7543	Sequence 7543, Ap	234	32	61.5	392	11	US-11-087-099-3414	Sequence 3414, Ap
162	32	61.5	374	11	US-11-087-099-7549	Sequence 7549, Ap	235	32	61.5	392	11	US-11-087-099-3683	Sequence 3683, Ap
163	32	61.5	374	11	US-11-087-099-7629	Sequence 7629, Ap	236	32	61.5	392	11	US-11-087-099-3683	Sequence 3683, Ap
164	32	61.5	374	11	US-11-087-099-7931	Sequence 7931, Ap	237	32	61.5	392	11	US-11-087-099-3878	Sequence 3878, Ap
165	32	61.5	374	11	US-11-087-099-8526	Sequence 8526, Ap	238	32	61.5	392	11	US-11-087-099-3905	Sequence 3905, Ap
166	32	61.5	374	11	US-11-087-099-8552	Sequence 8552, Ap	239	32	61.5	392	11	US-11-087-099-4033	Sequence 4033, Ap
167	32	61.5	374	11	US-11-087-099-8874	Sequence 8874, Ap	240	32	61.5	392	11	US-11-087-099-4347	Sequence 4347, Ap

241	32	61.5	392	11	US-11-087-099-4511	Sequence 4511, Ap	314	32	61.5	393	11	US-11-087-099-6464	Sequence 6464, Ap
242	32	61.5	392	11	US-11-087-099-4514	Sequence 4514, Ap	315	32	61.5	393	11	US-11-087-099-7970	Sequence 7970, Ap
243	32	61.5	392	11	US-11-087-099-4631	Sequence 4631, Ap	316	32	61.5	393	11	US-11-087-099-7992	Sequence 7992, Ap
244	32	61.5	392	11	US-11-087-099-4844	Sequence 4844, Ap	317	32	61.5	393	11	US-11-087-099-9555	Sequence 9585, Ap
245	32	61.5	392	11	US-11-087-099-4951	Sequence 4951, Ap	318	32	61.5	393	11	US-11-087-099-9960	Sequence 9980, Ap
246	32	61.5	392	11	US-11-087-099-5065	Sequence 5065, Ap	319	32	61.5	393	11	US-11-087-099-10371	Sequence 10371, A
247	32	61.5	392	11	US-11-087-099-5189	Sequence 5189, Ap	320	32	61.5	393	11	US-11-087-099-10685	Sequence 10685, A
248	32	61.5	392	11	US-11-087-099-5343	Sequence 5343, Ap	321	32	61.5	393	11	US-11-087-099-11279	Sequence 11279, A
249	32	61.5	392	11	US-11-087-099-5444	Sequence 5444, Ap	322	32	61.5	394	11	US-11-087-099-1240	Sequence 1240, Ap
250	32	61.5	392	11	US-11-087-099-5445	Sequence 5445, Ap	323	32	61.5	394	11	US-11-087-099-1541	Sequence 1541, Ap
251	32	61.5	392	11	US-11-087-099-5605	Sequence 5602, Ap	324	32	61.5	394	11	US-11-087-099-1719	Sequence 1719, Ap
252	32	61.5	392	11	US-11-087-099-5665	Sequence 5665, Ap	325	32	61.5	394	11	US-11-087-099-1797	Sequence 1879, Ap
253	32	61.5	392	11	US-11-087-099-5891	Sequence 5891, Ap	326	32	61.5	394	11	US-11-087-099-1979	Sequence 1997, Ap
254	32	61.5	392	11	US-11-087-099-6221	Sequence 6221, Ap	327	32	61.5	394	11	US-11-087-099-2106	Sequence 2106, Ap
255	32	61.5	392	11	US-11-087-099-6267	Sequence 6267, Ap	328	32	61.5	394	11	US-11-087-099-2355	Sequence 2395, Ap
256	32	61.5	392	11	US-11-087-099-6267	Sequence 6285, Ap	329	32	61.5	394	11	US-11-087-099-2746	Sequence 2746, Ap
257	32	61.5	392	11	US-11-087-099-6285	Sequence 6411, Ap	330	32	61.5	394	11	US-11-087-099-2848	Sequence 2848, Ap
258	32	61.5	392	11	US-11-087-099-6411	Sequence 6416, Ap	331	32	61.5	394	11	US-11-087-099-3167	Sequence 3167, Ap
259	32	61.5	392	11	US-11-087-099-6416	Sequence 6550, Ap	332	32	61.5	394	11	US-11-087-099-3181	Sequence 3181, Ap
260	32	61.5	392	11	US-11-087-099-6550	Sequence 6661, Ap	333	32	61.5	394	11	US-11-087-099-3349	Sequence 3349, Ap
261	32	61.5	392	11	US-11-087-099-6661	Sequence 6661, Ap	334	32	61.5	394	11	US-11-087-099-3507	Sequence 3507, Ap
262	32	61.5	392	11	US-11-087-099-7117	Sequence 7117, Ap	335	32	61.5	394	11	US-11-087-099-4447	Sequence 4447, Ap
263	32	61.5	392	11	US-11-087-099-7150	Sequence 7150, Ap	336	32	61.5	394	11	US-11-087-099-4785	Sequence 4785, Ap
264	32	61.5	392	11	US-11-087-099-7304	Sequence 7304, Ap	337	32	61.5	394	11	US-11-087-099-5538	Sequence 5338, Ap
265	32	61.5	392	11	US-11-087-099-7310	Sequence 7310, Ap	338	32	61.5	394	11	US-11-087-099-6788	Sequence 6788, Ap
266	32	61.5	392	11	US-11-087-099-7457	Sequence 7457, Ap	339	32	61.5	394	11	US-11-087-099-7993	Sequence 7993, Ap
267	32	61.5	392	11	US-11-087-099-7548	Sequence 7548, Ap	340	32	61.5	394	11	US-11-087-099-8340	Sequence 8340, Ap
268	32	61.5	392	11	US-11-087-099-7686	Sequence 7686, Ap	341	32	61.5	394	11	US-11-087-099-8649	Sequence 8649, Ap
269	32	61.5	392	11	US-11-087-099-7688	Sequence 8234, Ap	342	32	61.5	394	11	US-11-087-099-8852	Sequence 8852, Ap
270	32	61.5	392	11	US-11-087-099-8324	Sequence 8344, Ap	343	32	61.5	394	11	US-11-087-099-9203	Sequence 9203, Ap
271	32	61.5	392	11	US-11-087-099-8344	Sequence 8467, Ap	344	32	61.5	394	11	US-11-087-099-9261	Sequence 9610, Ap
272	32	61.5	392	11	US-11-087-099-8487	Sequence 8509, Ap	345	32	61.5	394	11	US-11-087-099-10842	Sequence 10842, A
273	32	61.5	392	11	US-11-087-099-8509	Sequence 8576, Ap	346	32	61.5	394	11	US-11-087-099-10866	Sequence 10866, A
274	32	61.5	392	11	US-11-087-099-8576	Sequence 8580, Ap	347	32	61.5	394	11	US-11-087-099-11201	Sequence 11301, A
275	32	61.5	392	11	US-11-087-099-8580	Sequence 8736, Ap	348	32	61.5	395	11	US-11-087-099-5258	Sequence 5258, Ap
276	32	61.5	392	11	US-11-087-099-8736	Sequence 9010, Ap	349	32	61.5	395	11	US-11-087-099-6521	Sequence 6521, Ap
277	32	61.5	392	11	US-11-087-099-9010	Sequence 9264, Ap	350	32	61.5	395	11	US-11-087-099-6766	Sequence 6766, Ap
278	32	61.5	392	11	US-11-087-099-9264	Sequence 9431, Ap	351	32	61.5	396	11	US-11-087-099-544	Sequence 544, App
279	32	61.5	392	11	US-11-087-099-9431	Sequence 9473, Ap	352	32	61.5	396	11	US-11-087-099-579	Sequence 579, App
280	32	61.5	392	11	US-11-087-099-9473	Sequence 9658, Ap	353	32	61.5	396	11	US-11-087-099-3518	Sequence 3518, App
281	32	61.5	392	11	US-11-087-099-9658	Sequence 9658, Ap	354	32	61.5	396	11	US-11-087-099-4710	Sequence 4710, Ap
282	32	61.5	392	11	US-11-087-099-9658	Sequence 9687, Ap	355	32	61.5	396	11	US-11-087-099-1848	Sequence 1848, Ap
283	32	61.5	392	11	US-11-087-099-9687	Sequence 9687, Ap	356	32	61.5	397	11	US-11-087-099-3365	Sequence 3365, Ap
284	32	61.5	392	11	US-11-087-099-9848	Sequence 9848, Ap	357	32	61.5	397	11	US-11-087-099-4012	Sequence 4012, Ap
285	32	61.5	392	11	US-11-087-099-9848	Sequence 9848, Ap	358	32	61.5	397	11	US-11-087-099-4446	Sequence 4446, Ap
286	32	61.5	392	11	US-11-087-099-10100	Sequence 10100, A	359	32	61.5	397	11	US-11-087-099-4792	Sequence 4792, Ap
287	32	61.5	392	11	US-11-087-099-10300	Sequence 10300, A	360	32	61.5	398	11	US-11-087-099-5162	Sequence 5162, Ap
288	32	61.5	392	11	US-11-087-099-10499	Sequence 10499, A	361	32	61.5	398	11	US-11-087-099-5516	Sequence 5516, Ap
289	32	61.5	392	11	US-11-087-099-10504	Sequence 10504, A	362	32	61.5	407	11	US-11-087-099-4042	Sequence 4042, Ap
290	32	61.5	392	11	US-11-087-099-10610	Sequence 10610, A	363	32	61.5	407	11	US-11-087-099-3133	Sequence 3133, Ap
291	32	61.5	392	11	US-11-087-099-10655	Sequence 10655, A	364	32	61.5	412	11	US-11-087-099-4133	Sequence 4133, Ap
292	32	61.5	392	11	US-11-087-099-10765	Sequence 10765, A	365	32	61.5	412	11	US-11-087-099-4955	Sequence 4955, Ap
293	32	61.5	392	11	US-11-087-099-10904	Sequence 10904, A	366	32	61.5	415	11	US-11-087-099-9763	Sequence 9763, Ap
294	32	61.5	392	11	US-11-087-099-10916	Sequence 10916, A	367	32	61.5	423	11	US-11-087-099-1868	Sequence 1868, Ap
295	32	61.5	392	11	US-11-087-099-10999	Sequence 10999, A	368	32	61.5	424	11	US-11-087-099-4442	Sequence 4442, Ap
296	32	61.5	392	11	US-11-087-099-11430	Sequence 11430, A	369	32	61.5	435	11	US-11-087-099-4180	Sequence 4180, Ap
297	32	61.5	392	11	US-11-087-099-11530	Sequence 11530, A	370	32	61.5	441	11	US-11-087-099-12034	Sequence 12034, A
298	32	61.5	392	11	US-11-087-099-11546	Sequence 11546, A	371	32	61.5	446	11	US-11-087-099-8812	Sequence 8812, Ap
299	32	61.5	392	11	US-11-087-099-11709	Sequence 11709, A	372	32	61.5	465	11	US-11-087-099-8677	Sequence 8677, Ap
300	32	61.5	392	11	US-11-087-099-11773	Sequence 11773, A	373	32	61.5	465	11	US-11-087-099-8677	Sequence 8677, Ap
301	32	61.5	392	11	US-11-087-099-11785	Sequence 11785, A	374	32	61.5	465	11	US-11-087-099-8812	Sequence 8812, Ap
302	32	61.5	392	11	US-11-087-099-11788	Sequence 11788, A	375	32	61.5	466	11	US-11-087-099-8812	Sequence 8812, Ap
303	32	61.5	392	11	US-11-087-099-11923	Sequence 11923, A	376	32	61.5	467	11	US-11-087-099-12034	Sequence 12034, A
304	32	61.5	392	11	US-11-087-099-11929	Sequence 11929, A	377	32	61.5	467	11	US-11-087-099-8328	Sequence 8328, Ap
305	32	61.5	392	11	US-11-087-099-11938	Sequence 11938, A	378	32	61.5	491	11	US-11-087-099-3210	Sequence 3210, Ap
306	32	61.5	392	11	US-11-087-099-12003	Sequence 12003, A	379	32	61.5	502	11	US-11-087-099-4210	Sequence 4210, Ap
307	32	61.5	392	11	US-11-087-099-12197	Sequence 12197, A	380	32	61.5	554	11	US-11-087-099-6609	Sequence 6609, Ap
308	32	61.5	393	11	US-11-087-099-867	Sequence 867, App	381	32	61.5	557	11	US-11-087-099-6609	Sequence 6609, Ap
309	32	61.5	393	11	US-11-087-099-1514	Sequence 1514, Ap	382	32	61.5	578	11	US-11-087-099-10712	Sequence 10712, A
310	32	61.5	393	11	US-11-087-099-4244	Sequence 4244, Ap	383	32	61.5	713	11	US-11-087-099-4395	Sequence 4395, A
311	32	61.5	393	11	US-11-087-099-4937	Sequence 4937, Ap	384	32	61.5	716	11	US-11-087-099-10154	Sequence 10154, A
312	32	61.5	393	11	US-11-087-099-5119	Sequence 5119, Ap	385	32	61.5	760	9	US-10-506-454-717	Sequence 717, App
313	32	61.5	393	11	US-11-087-099-6443	Sequence 6443, Ap	386	32	61.5	760	9	US-10-506-454-717	Sequence 717, App

387	32	61.5	876	11	US-11-087-099-9011	Sequence 9011, Ap	460	31	59.6	274	11	US-11-087-099-11799	Sequence 11799, A
388	32	61.5	973	11	US-11-087-099-4325	Sequence 4325, Ap	461	31	59.6	274	11	US-11-188-298-10895	Sequence 10895, A
389	32	61.5	1039	11	US-11-087-099-12154	Sequence 12154, A	462	31	59.6	349	11	US-11-087-099-9072	Sequence 9072, Ap
390	32	61.5	1049	11	US-11-087-099-10199	Sequence 1109, A	463	31	59.6	388	11	US-11-087-099-1571	Sequence 1571, Ap
391	32	61.5	1112	11	US-11-087-099-10149	Sequence 10149, A	464	31	59.6	389	11	US-11-087-099-10018	Sequence 10018, A
392	32	61.5	1115	11	US-11-087-099-8680	Sequence 8680, Ap	465	31	59.6	390	11	US-11-087-099-7423	Sequence 7423, Ap
393	32	61.5	1117	11	US-11-087-099-6893	Sequence 6893, Ap	466	31	59.6	391	11	US-11-087-099-12871	Sequence 12871, A
394	32	61.5	1118	11	US-11-087-099-2751	Sequence 2751, Ap	467	31	59.6	392	11	US-11-087-099-4211	Sequence 4211, Ap
395	32	61.5	1118	11	US-11-087-099-9174	Sequence 9174, Ap	468	31	59.6	401	11	US-11-087-099-6442	Sequence 6402, Ap
396	32	61.5	1121	11	US-11-087-099-8532	Sequence 8532, Ap	469	31	59.6	415	11	US-11-087-099-7779	Sequence 7779, Ap
397	32	61.5	1121	11	US-11-087-099-9800	Sequence 9800, Ap	470	31	59.6	441	11	US-11-087-099-3500	Sequence 3500, Ap
398	32	61.5	1121	11	US-11-087-099-10482	Sequence 10482, A	471	31	59.6	462	11	US-11-045-004-1111	Sequence 1111, Ap
399	32	61.5	1121	11	US-11-087-099-11165	Sequence 11165, A	472	31	59.6	463	11	US-11-087-099-9933	Sequence 9933, Ap
400	32	61.5	1122	11	US-11-087-099-3459	Sequence 3459, Ap	473	31	59.6	464	11	US-11-087-099-2021	Sequence 2021, Ap
401	32	61.5	1123	11	US-11-087-099-9908	Sequence 9908, Ap	474	31	59.6	464	11	US-11-087-099-3098	Sequence 3098, Ap
402	32	61.5	1124	11	US-11-087-099-9425	Sequence 9425, Ap	475	31	59.6	465	11	US-11-087-099-2276	Sequence 2276, Ap
403	32	61.5	1126	11	US-11-087-099-1095	Sequence 1095, Ap	476	31	59.6	465	11	US-11-087-099-3244	Sequence 3234, Ap
404	32	61.5	1126	11	US-11-087-099-2533	Sequence 2533, Ap	477	31	59.6	465	11	US-11-087-099-6887	Sequence 6887, Ap
405	32	61.5	1126	11	US-11-087-099-5243	Sequence 5243, Ap	478	31	59.6	465	11	US-11-087-099-7406	Sequence 7406, Ap
406	32	61.5	1129	11	US-11-087-099-3328	Sequence 3328, Ap	479	31	59.6	465	11	US-11-087-099-8842	Sequence 8842, Ap
407	32	61.5	1130	11	US-11-087-099-6723	Sequence 6723, Ap	480	31	59.6	465	11	US-11-087-099-12137	Sequence 12137, A
408	32	61.5	1130	11	US-11-087-099-9957	Sequence 9957, Ap	481	31	59.6	467	11	US-11-087-099-9940	Sequence 9940, Ap
409	32	61.5	1131	11	US-11-087-099-9711	Sequence 9711, Ap	482	31	59.6	482	11	US-11-031-206-180	Sequence 180, Ap
410	32	61.5	1131	11	US-11-087-099-3832	Sequence 3832, Ap	483	31	59.6	492	11	US-11-045-004-2160	Sequence 2160, Ap
411	32	61.5	1132	11	US-11-087-099-1451	Sequence 1451, Ap	484	31	59.6	909	11	US-11-120-308-190	Sequence 190, Ap
412	32	61.5	1132	11	US-11-087-099-7466	Sequence 7466, Ap	485	31	59.6	909	11	US-11-031-206-168	Sequence 168, Ap
413	32	61.5	1134	11	US-11-087-099-1744	Sequence 1744, Ap	486	31	59.6	1114	9	US-10-469-469-9261	Sequence 277, Ap
414	32	61.5	1135	11	US-11-087-099-524	Sequence 524, Ap	487	31	59.6	1122	11	US-11-087-099-1261	Sequence 1261, Ap
415	32	61.5	1135	11	US-11-087-099-2568	Sequence 2568, Ap	488	31	59.6	1122	11	US-11-087-099-3430	Sequence 3430, Ap
416	32	61.5	1135	11	US-11-087-099-8583	Sequence 8583, Ap	489	31	59.6	1122	11	US-11-087-099-5939	Sequence 5939, Ap
417	32	61.5	1136	11	US-11-087-099-3920	Sequence 3920, Ap	490	31	59.6	1122	11	US-11-087-099-9404	Sequence 9404, Ap
418	32	61.5	1137	11	US-11-087-099-2651	Sequence 2651, Ap	491	31	59.6	1122	11	US-11-087-099-12448	Sequence 12448, A
419	32	61.5	1137	11	US-11-087-099-5139	Sequence 5139, Ap	492	31	59.6	1123	11	US-11-087-099-4889	Sequence 4889, Ap
420	32	61.5	1137	11	US-11-087-099-8073	Sequence 8073, Ap	493	31	59.6	1123	11	US-11-087-099-5347	Sequence 5347, Ap
421	32	61.5	1137	11	US-11-087-099-9891	Sequence 9891, Ap	494	31	59.6	1123	11	US-11-087-099-9833	Sequence 9833, Ap
422	32	61.5	1137	11	US-11-087-099-10269	Sequence 10269, A	495	31	59.6	1124	11	US-11-087-099-1183	Sequence 1183, Ap
423	32	61.5	1139	11	US-11-087-099-3294	Sequence 3294, Ap	496	31	59.6	1124	11	US-11-087-099-1938	Sequence 1938, Ap
424	32	61.5	1139	11	US-11-087-099-6278	Sequence 6278, Ap	497	31	59.6	1124	11	US-11-087-099-2565	Sequence 2565, Ap
425	32	61.5	1140	11	US-11-087-099-11073	Sequence 11073, A	498	31	59.6	1124	11	US-11-087-099-4885	Sequence 4885, Ap
426	32	61.5	1142	11	US-11-087-099-6734	Sequence 6734, Ap	499	31	59.6	1125	11	US-11-087-099-2336	Sequence 2336, Ap
427	32	61.5	1145	11	US-11-087-099-11401	Sequence 11401, A	500	31	59.6	2035	9	US-10-821-234-1610	Sequence 1610, Ap
428	32	61.5	1146	11	US-11-087-099-723	Sequence 723, App	501	31	59.6	4051	8	US-10-501-834-7	Sequence 7, App1
429	32	61.5	1151	11	US-11-087-099-9496	Sequence 9496, Ap	502	31	59.6	4059	8	US-10-501-834-6	Sequence 6, App1
430	32	61.5	1156	11	US-11-087-099-4316	Sequence 4316, Ap	503	31	59.6	4074	8	US-10-501-834-2	Sequence 2, App1
431	32	61.5	1164	11	US-11-087-099-2278	Sequence 2278, Ap	504	31	58.7	525	11	US-11-188-298-18405	Sequence 18405, A
432	32	61.5	1164	11	US-11-087-099-9070	Sequence 9070, Ap	505	30.5	57.7	10	9	US-10-530-061-790	Sequence 790, App
433	32	61.5	1171	11	US-11-087-099-2303	Sequence 2303, Ap	506	30	57.7	18	11	US-11-033-039-1336	Sequence 1326, Ap
434	32	61.5	1171	11	US-11-087-099-3806	Sequence 3806, Ap	507	30	57.7	117	11	US-11-096-5688-14847	Sequence 4847, Ap
435	32	61.5	1171	11	US-11-087-099-7445	Sequence 7445, Ap	508	30	57.7	197	11	US-11-188-298-16129	Sequence 16129, A
436	32	61.5	1171	11	US-11-087-099-9917	Sequence 9917, Ap	509	30	57.7	199	11	US-11-188-298-10553	Sequence 10553, A
437	32	61.5	1172	11	US-11-087-099-5576	Sequence 5576, Ap	510	30	57.7	242	9	US-10-725-475-13	Sequence 13, App1
438	32	61.5	1178	11	US-11-087-099-10105	Sequence 10105, A	511	30	57.7	261	11	US-11-072-512-2517	Sequence 2517, Ap
439	32	61.5	1299	11	US-11-087-099-9446	Sequence 9446, A	512	30	57.7	263	11	US-11-096-5688-28465	Sequence 28465, A
440	32	61.5	1303	11	US-11-087-099-1056	Sequence 10526, A	513	30	57.7	264	11	US-11-096-5688-4430	Sequence 4430, Ap
441	32	61.5	1307	11	US-11-087-099-4253	Sequence 4253, Ap	514	30	57.7	274	11	US-11-096-5688-28464	Sequence 28464, A
442	31	59.6	14	11	US-11-232-439-31	Sequence 31, App1	515	30	57.7	275	11	US-11-096-5688-31108	Sequence 31108, A
443	31	59.6	14	11	US-11-232-439-32	Sequence 32, App1	516	30	57.7	283	11	US-11-255-794-9	Sequence 9, App1
444	31	59.6	15	9	US-10-530-061-1689	Sequence 1689, Ap	517	30	57.7	283	11	US-11-255-794-24	Sequence 24, App1
445	31	59.6	17	11	US-11-232-439-451	Sequence 451, App	518	30	57.7	287	11	US-11-096-5688-31107	Sequence 31107, A
446	31	59.6	25	11	US-11-232-439-164	Sequence 164, App	519	30	57.7	302	11	US-11-087-099-240	Sequence 240, App
447	31	59.6	82	11	US-11-188-298-7388	Sequence 7388, Ap	520	30	57.7	307	11	US-11-096-5688-4429	Sequence 4429, Ap
448	31	59.6	102	9	US-10-467-657-796	Sequence 796, App	521	30	57.7	322	11	US-11-096-5688-4428	Sequence 4428, Ap
449	31	59.6	148	9	US-10-530-253-22	Sequence 22, App1	522	30	57.7	324	11	US-11-087-099-7551	Sequence 7581, Ap
450	31	59.6	154	9	US-11-031-206-166	Sequence 166, App	523	30	57.7	340	11	US-11-188-298-13099	Sequence 13099, A
451	31	59.6	178	9	US-10-467-657-8306	Sequence 8306, Ap	524	30	57.7	348	11	US-11-087-099-10136	Sequence 10136, A
452	31	59.6	196	9	US-10-467-657-5810	Sequence 5810, Ap	525	30	57.7	377	11	US-11-087-099-2908	Sequence 2908, Ap
453	31	59.6	209	11	US-11-087-099-3865	Sequence 3865, Ap	526	30	57.7	378	11	US-11-188-298-762	Sequence 762, App
454	31	59.6	210	11	US-11-087-099-5592	Sequence 5592, Ap	527	30	57.7	387	11	US-11-188-298-7450	Sequence 7450, App
455	31	59.6	210	11	US-11-087-099-9624	Sequence 9624, Ap	528	30	57.7	389	11	US-11-188-298-1562	Sequence 1562, Ap
456	31	59.6	210	11	US-11-087-099-9624	Sequence 9624, A	529	30	57.7	390	11	US-11-087-099-8039	Sequence 8039, Ap
457	31	59.6	218	11	US-11-188-298-15886	Sequence 15886, A	530	30	57.7	391	11	US-11-087-099-3879	Sequence 3879, Ap
458	31	59.6	230	11	US-11-188-298-1774	Sequence 1774, Ap	531	30	57.7	392	11	US-11-087-099-9567	Sequence 9567, Ap
459	31	59.6	262	11	US-11-072-512-2006	Sequence 2006, Ap	532	30	57.7	394	11	US-11-087-099-2818	Sequence 2818, Ap

533	30	57.7	404	11	US-11-188-298-8645	Sequence 8645, Ap	606	29	55.8	278	11	US-11-096-568A-25421	Sequence 25421, A
534	30	57.7	410	11	US-11-188-298-8233	Sequence 8233, Ap	607	29	55.8	286	11	US-11-096-568A-25420	Sequence 25420, A
535	30	57.7	413	11	US-11-188-298-8235	Sequence 8235, Ap	608	29	55.8	302	11	US-11-096-568A-19617	Sequence 19617, A
536	30	57.7	413	11	US-11-188-298-15320	Sequence 15320, A	609	29	55.8	315	11	US-11-096-568A-8939	Sequence 8939, Ap
537	30	57.7	415	11	US-11-188-298-11955	Sequence 11955, A	610	29	55.8	315	11	US-11-096-568A-25419	Sequence 25419, A
538	30	57.7	417	11	US-11-188-298-827	Sequence 527, App	611	29	55.8	320	9	US-10-995-561-947	Sequence 947, App
539	30	57.7	417	11	US-11-188-298-13600	Sequence 13600, A	612	29	55.8	328	11	US-11-096-568A-8588	Sequence 8588, Ap
540	30	57.7	418	11	US-11-087-099-10604	Sequence 10604, A	613	29	55.8	339	11	US-11-264-096-2185	Sequence 2185, Ap
541	30	57.7	424	11	US-11-188-298-9036	Sequence 9036, Ap	614	29	55.8	352	11	US-11-096-568A-8957	Sequence 8957, Ap
542	30	57.7	428	11	US-11-087-099-7343	Sequence 7343, Ap	615	29	55.8	359	11	US-11-188-298-15241	Sequence 15241, A
543	30	57.7	469	9	US-10-467-657-4370	Sequence 4370, Ap	616	29	55.8	367	11	US-11-045-004-1309	Sequence 1309, Ap
544	30	57.7	477	11	US-11-188-298-10698	Sequence 10698, A	617	29	55.8	372	11	US-10-844-035-1	Sequence 1, App11
545	30	57.7	488	11	US-11-188-298-807	Sequence 807, App	618	29	55.8	373	9	US-10-995-561-948	Sequence 948, App
546	30	57.7	488	11	US-11-188-298-17472	Sequence 17472, A	619	29	55.8	374	11	US-11-087-099-11204	Sequence 11204, A
547	30	57.7	521	11	US-11-109-156-34	Sequence 34, App1	620	29	55.8	374	11	US-11-188-298-11848	Sequence 11848, A
548	30	57.7	526	11	US-11-188-298-11105	Sequence 11105, A	621	29	55.8	376	11	US-10-995-561-946	Sequence 946, App
549	30	57.7	553	11	US-11-188-298-6247	Sequence 6247, Ap	622	29	55.8	376	11	US-11-087-099-10032	Sequence 10032, A
550	30	57.7	553	11	US-11-188-298-14994	Sequence 14994, A	623	29	55.8	385	9	US-10-995-561-945	Sequence 945, App
551	30	57.7	558	11	US-11-133-360-19	Sequence 19, App1	624	29	55.8	385	9	US-10-995-561-945	Sequence 945, App
552	30	57.7	558	11	US-11-133-360-19	Sequence 19, App1	625	29	55.8	392	11	US-11-087-099-1267	Sequence 1267, Ap
553	30	57.7	560	11	US-11-033-039-1312	Sequence 1312, Ap	626	29	55.8	392	11	US-11-087-099-1089	Sequence 1089, Ap
554	30	57.7	560	11	US-11-131-479-22	Sequence 22, App1	627	29	55.8	398	11	US-11-096-568A-18324	Sequence 18324, A
555	30	57.7	560	11	US-11-188-298-1680	Sequence 1680, Ap	628	29	55.8	401	9	US-10-517-939-246	Sequence 246, App
556	30	57.7	567	11	US-11-072-512-3148	Sequence 3148, Ap	629	29	55.8	406	11	US-11-131-479-18	Sequence 18, App1
557	30	57.7	577	11	US-11-096-568A-28886	Sequence 28886, A	630	29	55.8	420	11	US-11-096-568A-19616	Sequence 19616, A
558	30	57.7	644	11	US-11-096-568A-28885	Sequence 28885, A	631	29	55.8	426	9	US-10-965-103-4	Sequence 4, App11
559	30	57.7	679	11	US-11-188-298-9136	Sequence 9136, Ap	632	29	55.8	426	11	US-11-270-717-4	Sequence 11038, A
560	30	57.7	752	11	US-11-096-568A-28884	Sequence 28884, A	633	29	55.8	430	11	US-11-098-686-11038	Sequence 5505, Ap
561	30	57.7	841	11	US-11-096-568A-31435	Sequence 31435, A	634	29	55.8	430	11	US-11-087-099-5505	Sequence 7396, Ap
562	30	57.7	841	11	US-11-096-568A-22970	Sequence 32970, A	635	29	55.8	430	11	US-11-087-099-1396	Sequence 12253, A
563	30	57.7	880	11	US-11-096-568A-31424	Sequence 31424, A	636	29	55.8	430	11	US-11-087-099-12253	Sequence 574, App
564	30	57.7	880	11	US-11-096-568A-32969	Sequence 32969, A	637	29	55.8	437	11	US-11-087-099-574	Sequence 18323, A
565	30	57.7	895	11	US-11-096-568A-31423	Sequence 31423, A	638	29	55.8	463	11	US-11-096-568A-18323	Sequence 9783, Ap
566	30	57.7	905	11	US-11-096-568A-32968	Sequence 32968, A	639	29	55.8	469	11	US-11-087-099-9783	Sequence 404, App
567	30	57.7	901	9	US-10-330-773-870	Sequence 870, App	640	29	55.8	511	11	US-11-188-298-404	Sequence 18322, A
568	30	57.7	905	9	US-10-330-773-873	Sequence 873, App	641	29	55.8	520	11	US-11-096-568A-18322	Sequence 733, App
569	30	57.7	1111	11	US-11-087-099-998	Sequence 998, App	642	29	55.8	529	11	US-11-144-947-469	Sequence 469, App
570	30	57.7	1111	11	US-11-087-099-5147	Sequence 5147, Ap	643	29	55.8	548	11	US-11-096-568A-33137	Sequence 33137, A
571	30	57.7	1137	11	US-11-087-099-5799	Sequence 5799, Ap	644	29	55.8	575	11	US-11-188-298-13893	Sequence 13893, A
572	30	57.7	1674	8	US-10-511-937-2587	Sequence 2587, Ap	645	29	55.8	575	11	US-11-096-568A-33136	Sequence 33136, A
573	30	57.7	1754	11	US-11-188-298-13090	Sequence 13090, A	646	29	55.8	587	8	US-10-511-937-2407	Sequence 2407, Ap
574	29.5	56.7	350	11	US-11-103-957-19	Sequence 19, App1	647	29	55.8	630	11	US-11-096-568A-33135	Sequence 33135, A
575	29	55.8	9	9	US-10-530-061-846	Sequence 846, App	648	29	55.8	700	8	US-10-505-928-351	Sequence 351, App
576	29	55.8	11	9	US-10-530-061-487	Sequence 487, App	649	29	55.8	837	11	US-11-188-298-8046	Sequence 8046, Ap
577	29	55.8	15	9	US-10-530-061-1664	Sequence 1664, Ap	650	29	55.8	1142	9	US-10-501-035-376	Sequence 376, App
578	29	55.8	15	9	US-10-530-061-1684	Sequence 1684, Ap	651	29	55.8	1142	9	US-10-501-035-376	Sequence 376, App
579	29	55.8	15	11	US-11-140-284-25	Sequence 25, App1	652	29	55.8	1154	9	US-11-109-156-22	Sequence 867, App
580	29	55.8	20	11	US-11-145-861-75	Sequence 75, App1	653	29	55.8	1170	9	US-10-330-773-867	Sequence 864, App
581	29	55.8	50	11	US-11-234-225-22	Sequence 22, App1	654	29	55.8	1411	11	US-11-004-339-627	Sequence 14692, A
582	29	55.8	50	11	US-11-234-225-31	Sequence 31, App1	655	29	55.8	1411	11	US-11-004-339-627	Sequence 14691, A
583	29	55.8	50	11	US-11-234-308-22	Sequence 22, App1	656	29	55.8	1411	11	US-11-004-339-627	Sequence 14690, A
584	29	55.8	50	11	US-11-234-308-31	Sequence 31, App1	657	29	55.8	1411	11	US-11-004-339-627	Sequence 14689, A
585	29	55.8	73	11	US-11-096-568A-14165	Sequence 14165, A	658	29	55.8	1411	11	US-11-096-568A-14690	Sequence 296, App
586	29	55.8	79	11	US-11-140-284-15	Sequence 15, App1	659	29	55.8	1411	11	US-11-096-568A-14690	Sequence 296, App
587	29	55.8	107	11	US-11-188-298-12105	Sequence 12105, A	660	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
588	29	55.8	113	11	US-11-096-568A-25935	Sequence 25935, A	661	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
589	29	55.8	115	11	US-11-096-568A-14164	Sequence 14164, A	662	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
590	29	55.8	126	11	US-11-096-568A-14163	Sequence 14163, A	663	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
591	29	55.8	149	11	US-11-064-774A-115	Sequence 115, App	664	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
592	29	55.8	149	11	US-11-075-400-4	Sequence 4, App1	665	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
593	29	55.8	149	11	US-11-226-005-5	Sequence 5, App1	666	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
594	29	55.8	149	11	US-11-226-005-5	Sequence 5, App1	667	29	55.8	1411	11	US-11-004-339-627	Sequence 3637, App
595	29	55.8	158	9	US-10-530-253-15	Sequence 85, App1	668	29	55.8	1411	11	US-11-229-769-180	Sequence 180, App
596	29	55.8	158	9	US-10-530-253-15	Sequence 15, App1	669	29	55.8	1411	11	US-10-506-454-577	Sequence 577, App
597	29	55.8	158	9	US-10-530-253-20	Sequence 20, App1	670	29	55.8	1411	11	US-10-948-571-55	Sequence 55, App1
598	29	55.8	158	9	US-10-530-253-20	Sequence 20, App1	671	29	55.8	1411	11	US-11-226-657-137	Sequence 167, App
599	29	55.8	167	11	US-11-264-096-499	Sequence 499, App	672	29	55.8	1411	11	US-11-264-096-1133	Sequence 1133, Ap
600	29	55.8	170	8	US-10-505-928-584	Sequence 584, App	673	29	55.8	1411	11	US-11-264-096-1185	Sequence 1185, Ap
601	29	55.8	193	11	US-11-045-004-351	Sequence 351, App	674	29	55.8	1411	11	US-11-264-096-1185	Sequence 1135, Ap
602	29	55.8	205	9	US-10-330-773-962	Sequence 962, App	675	29	55.8	1411	11	US-11-188-298-9803	Sequence 9803, Ap
603	29	55.8	229	11	US-11-188-298-15080	Sequence 15080, A	676	29	55.8	1411	11	US-11-188-298-9803	Sequence 9803, Ap
604	29	55.8	231	11	US-11-188-298-3441	Sequence 3441, Ap	677	29	55.8	1411	11	US-11-188-298-9803	Sequence 9803, Ap
605	29	55.8	268	11	US-11-087-099-402	Sequence 402, App	678	29	55.8	1411	11	US-11-188-298-5872	Sequence 5872, A

679	28	53.8	112	11	US-11-188-298-21450	Sequence 21450, A	752	28	53.8	365	11	US-11-188-298-20100	Sequence 20100, A
680	28	53.8	123	11	US-11-079-463-6625	Sequence 6625, Ap	753	28	53.8	366	11	US-11-188-298-113199	Sequence 113199, A
681	28	53.8	123	9	US-10-873-528-137	Sequence 137, Appl	754	28	53.8	367	9	US-10-821-234-1058	Sequence 1058, Ap
682	28	53.8	132	11	US-11-073-005-15	Sequence 15, Appl	755	28	53.8	367	11	US-11-188-298-6832	Sequence 6832, Ap
683	28	53.8	132	11	US-11-064-774A-151	Sequence 151, Appl	756	28	53.8	367	11	US-11-188-298-14001	Sequence 14001, A
684	28	53.8	132	11	US-11-075-047A-93	Sequence 93, Appl	757	28	53.8	367	11	US-11-188-298-16726	Sequence 16726, A
685	28	53.8	137	11	US-11-188-298-4438	Sequence 4438, Ap	758	28	53.8	371	9	US-10-995-561-572	Sequence 572, Appl
686	28	53.8	147	11	US-11-045-004-1763	Sequence 1763, Ap	759	28	53.8	372	11	US-11-096-568A-32488	Sequence 32488, A
687	28	53.8	151	9	US-10-530-253-21	Sequence 21, Appl	760	28	53.8	372	11	US-11-188-298-14016	Sequence 14016, A
688	28	53.8	153	11	US-11-072-512-2778	Sequence 2778, Ap	761	28	53.8	374	11	US-11-087-009-1054	Sequence 1054, Ap
689	28	53.8	157	11	US-11-079-463-6149	Sequence 6149, Ap	762	28	53.8	374	11	US-11-087-009-11257	Sequence 1257, Ap
690	28	53.8	159	11	US-11-188-298-10507	Sequence 10507, A	763	28	53.8	375	9	US-10-467-657-1736	Sequence 1766, Ap
691	28	53.8	161	11	US-11-188-298-5940	Sequence 5940, Ap	764	28	53.8	380	11	US-11-180-004-16	Sequence 16, Appl
692	28	53.8	161	11	US-11-188-298-8929	Sequence 8929, Ap	765	28	53.8	380	11	US-11-096-568A-23147	Sequence 23147, A
693	28	53.8	162	11	US-11-188-298-12756	Sequence 12756, A	766	28	53.8	384	11	US-11-096-568A-11063	Sequence 13066, A
694	28	53.8	162	11	US-11-072-175-141	Sequence 141, Appl	767	28	53.8	389	11	US-11-188-298-18149	Sequence 18149, A
695	28	53.8	163	11	US-11-188-298-14988	Sequence 14988, A	768	28	53.8	390	11	US-11-072-512-2682	Sequence 2682, Ap
696	28	53.8	164	11	US-11-188-298-11068	Sequence 11068, A	769	28	53.8	392	11	US-11-087-009-9859	Sequence 9859, Ap
697	28	53.8	164	11	US-11-188-298-11347	Sequence 11347, A	770	28	53.8	392	11	US-11-096-568A-11062	Sequence 13062, A
698	28	53.8	164	11	US-11-188-298-22366	Sequence 22366, A	771	28	53.8	392	11	US-11-079-463-8290	Sequence 8290, Ap
699	28	53.8	172	11	US-11-096-568A-3967	Sequence 3967, Ap	772	28	53.8	396	11	US-11-096-568A-32487	Sequence 32487, A
700	28	53.8	202	9	US-10-915-002-217	Sequence 217, Appl	773	28	53.8	397	11	US-11-087-009-1336	Sequence 1336, Ap
701	28	53.8	204	11	US-11-188-298-21313	Sequence 21313, A	774	28	53.8	398	11	US-11-087-009-9003	Sequence 9003, Ap
702	28	53.8	219	11	US-11-045-004-720	Sequence 720, Appl	775	28	53.8	398	11	US-11-087-009-10034	Sequence 10034, A
703	28	53.8	224	11	US-11-096-568A-25751	Sequence 25751, A	776	28	53.8	403	11	US-11-096-568A-32486	Sequence 32486, A
704	28	53.8	237	11	US-11-264-096-1316	Sequence 1316, Ap	777	28	53.8	414	11	US-11-087-009-3464	Sequence 3464, Ap
705	28	53.8	245	11	US-11-188-298-16386	Sequence 16386, Ap	778	28	53.8	419	11	US-11-087-009-8659	Sequence 8659, Ap
706	28	53.8	251	11	US-11-096-568A-21502	Sequence 21502, A	779	28	53.8	420	11	US-11-096-568A-11061	Sequence 13061, A
707	28	53.8	251	11	US-11-188-298-14674	Sequence 14674, A	780	28	53.8	423	11	US-11-087-009-570	Sequence 570, Appl
708	28	53.8	256	11	US-11-096-568A-23905	Sequence 23905, A	781	28	53.8	423	11	US-11-087-009-2484	Sequence 2484, Ap
709	28	53.8	264	11	US-11-079-463-8529	Sequence 8529, Ap	782	28	53.8	423	11	US-11-087-009-12321	Sequence 12321, A
710	28	53.8	266	11	US-11-241-056-13	Sequence 13, Appl	783	28	53.8	423	11	US-11-188-298-19206	Sequence 19206, A
711	28	53.8	269	11	US-11-079-463-7674	Sequence 7674, Appl	784	28	53.8	427	11	US-11-087-009-11688	Sequence 11888, A
712	28	53.8	270	11	US-11-072-512-3274	Sequence 3274, Ap	785	28	53.8	429	11	US-11-087-009-8332	Sequence 8332, Ap
713	28	53.8	275	11	US-11-241-056-8	Sequence 8, Appl1	786	28	53.8	430	11	US-11-096-568A-7191	Sequence 7191, Ap
714	28	53.8	289	11	US-11-098-686-10602	Sequence 10602, A	787	28	53.8	431	9	US-10-821-234-1285	Sequence 1285, Ap
715	28	53.8	293	11	US-11-188-298-2608	Sequence 2608, Ap	788	28	53.8	437	11	US-11-188-298-18255	Sequence 18255, A
716	28	53.8	295	11	US-11-096-568A-21501	Sequence 21501, A	789	28	53.8	455	11	US-11-072-512-2644	Sequence 2644, Ap
717	28	53.8	295	11	US-11-172-740-1726	Sequence 1726, Ap	790	28	53.8	460	11	US-11-072-512-2784	Sequence 2784, Ap
718	28	53.8	297	11	US-11-096-568A-21500	Sequence 21500, A	791	28	53.8	461	11	US-11-188-298-4166	Sequence 4166, Ap
719	28	53.8	313	11	US-11-188-298-17411	Sequence 17411, A	792	28	53.8	461	11	US-11-188-298-10851	Sequence 10851, A
720	28	53.8	314	9	US-10-467-657-5094	Sequence 5094, Ap	793	28	53.8	461	11	US-11-188-298-13172	Sequence 13172, A
721	28	53.8	314	11	US-11-096-568A-7192	Sequence 7192, Ap	794	28	53.8	465	11	US-11-188-298-15364	Sequence 15364, A
722	28	53.8	320	11	US-11-096-568A-25656	Sequence 25656, A	795	28	53.8	466	11	US-11-087-009-6619	Sequence 6619, Ap
723	28	53.8	328	11	US-11-096-568A-5465	Sequence 5465, Ap	796	28	53.8	489	11	US-11-079-463-6538	Sequence 6538, Ap
724	28	53.8	338	11	US-11-096-568A-5464	Sequence 5464, Appl	797	28	53.8	502	11	US-11-199-233-13	Sequence 13, Appl
725	28	53.8	339	11	US-11-229-371-74	Sequence 74, Appl	798	28	53.8	531	9	US-10-880-881-41	Sequence 41, Appl
726	28	53.8	339	11	US-11-228-923-74	Sequence 74, Appl	799	28	53.8	545	11	US-11-188-298-17504	Sequence 17504, A
727	28	53.8	339	11	US-11-228-875-74	Sequence 74, Appl	800	28	53.8	551	9	US-10-880-881-2	Sequence 2, Appl1
728	28	53.8	340	9	US-10-506-454-61	Sequence 61, Appl	801	28	53.8	551	9	US-10-880-881-8	Sequence 8, Appl1
729	28	53.8	343	8	US-10-511-937-2511	Sequence 2511, Ap	802	28	53.8	552	9	US-10-880-881-8	Sequence 37, Appl
730	28	53.8	344	11	US-11-045-004-1788	Sequence 1788, Ap	803	28	53.8	570	9	US-10-821-234-1601	Sequence 8, Appl1
731	28	53.8	345	11	US-11-087-009-6778	Sequence 6778, Ap	804	28	53.8	577	11	US-11-079-463-7370	Sequence 7370, Ap
732	28	53.8	346	11	US-11-087-009-6778	Sequence 6778, Ap	805	28	53.8	607	11	US-11-188-298-1216	Sequence 1216, Ap
733	28	53.8	351	11	US-11-122-849-2	Sequence 2, Appl1	806	28	53.8	612	9	US-10-821-234-1101	Sequence 1101, Ap
734	28	53.8	352	9	US-10-888-962-8	Sequence 8, Appl1	807	28	53.8	629	11	US-11-188-298-17969	Sequence 17969, A
735	28	53.8	352	9	US-10-496-647-2	Sequence 2, Appl1	808	28	53.8	636	9	US-10-467-657-1856	Sequence 1856, Ap
736	28	53.8	352	9	US-10-496-647-4	Sequence 4, Appl1	809	28	53.8	642	11	US-11-188-298-15288	Sequence 15288, A
737	28	53.8	352	9	US-10-496-647-6	Sequence 6, Appl1	810	28	53.8	652	11	US-11-137-463-55	Sequence 55, Appl
738	28	53.8	352	9	US-10-496-647-8	Sequence 8, Appl1	811	28	53.8	653	11	US-11-079-463-8936	Sequence 8936, Ap
739	28	53.8	357	11	US-11-087-009-6284	Sequence 6284, Ap	812	28	53.8	682	11	US-11-079-463-8936	Sequence 8936, Ap
740	28	53.8	357	11	US-11-096-568A-23149	Sequence 23149, A	813	28	53.8	744	11	US-11-079-463-6668	Sequence 6668, Ap
741	28	53.8	360	8	US-10-511-937-2579	Sequence 2579, Ap	814	28	53.8	747	9	US-10-821-234-1662	Sequence 1662, Ap
742	28	53.8	360	9	US-10-496-647-10	Sequence 10, Appl	815	28	53.8	774	8	US-10-505-928-576	Sequence 576, Appl
743	28	53.8	360	9	US-10-496-647-12	Sequence 12, Appl	816	28	53.8	774	9	US-10-055-977-191	Sequence 191, Appl
744	28	53.8	360	9	US-10-496-647-14	Sequence 14, Appl	817	28	53.8	820	9	US-10-330-773-533	Sequence 533, Appl
745	28	53.8	360	9	US-10-496-647-16	Sequence 16, Appl	818	28	53.8	823	11	US-11-166-892-4	Sequence 4, Appl1
746	28	53.8	363	11	US-11-096-568A-5463	Sequence 5463, Ap	819	28	53.8	838	11	US-11-031-737A-11	Sequence 11, Appl
747	28	53.8	364	11	US-11-087-009-5795	Sequence 5795, Ap	820	28	53.8	838	11	US-11-031-482-11	Sequence 11, Appl
748	28	53.8	364	11	US-11-087-009-6283	Sequence 6283, Ap	821	28	53.8	886	9	US-10-821-234-1390	Sequence 1390, Ap
749	28	53.8	364	11	US-11-087-009-9690	Sequence 9690, Ap	822	28	53.8	898	11	US-11-188-298-9833	Sequence 9833, Ap
750	28	53.8	364	11	US-11-096-568A-23148	Sequence 23148, A	823	28	53.8	903	11	US-11-188-298-9486	Sequence 9486, Ap
751	28	53.8	365	11	US-11-188-298-18092	Sequence 18092, A	824	28	53.8	966	11	US-11-079-463-10025	Sequence 10025, A

825	28	53.8	1062	11	US-11-137-465-43	Sequence 43, Appl	898	27	51.9	102	11	US-11-064-774A-705	Sequence 705, App
826	28	53.8	1077	11	US-11-072-512-2291	Sequence 2291, Ap	899	27	51.9	102	11	US-11-064-774A-707	Sequence 707, App
827	28	53.8	1212	9	US-10-979-095-9	Sequence 9, Appl1	900	27	51.9	102	11	US-11-064-774A-713	Sequence 713, App
828	28	53.8	1221	9	US-10-506-454-49	Sequence 49, Appl1	901	27	51.9	102	11	US-11-064-774A-715	Sequence 715, App
829	28	53.8	1248	11	US-11-079-463-7695	Sequence 7695, Ap	902	27	51.9	102	11	US-11-064-774A-755	Sequence 755, App
830	28	53.8	1260	11	US-11-241-056-14	Sequence 14, Appl	903	27	51.9	102	11	US-11-064-774A-755	Sequence 755, App
831	28	53.8	1268	9	US-10-770-303-2	Sequence 2, Appl1	904	27	51.9	102	11	US-11-064-774A-761	Sequence 761, App
832	28	53.8	1368	11	US-11-185-372-2	Sequence 2, Appl1	905	27	51.9	102	11	US-11-064-774A-769	Sequence 769, App
833	28	53.8	1376	9	US-10-995-561-809	Sequence 809, App	906	27	51.9	102	11	US-11-064-774A-771	Sequence 771, App
834	28	53.8	1376	11	US-11-100-640-32	Sequence 32, Appl	907	27	51.9	102	11	US-11-064-774A-777	Sequence 777, App
835	28	53.8	1385	9	US-10-501-035-351	Sequence 351, App	908	27	51.9	102	11	US-11-064-774A-779	Sequence 779, App
836	28	53.8	1385	11	US-11-096-568A-30745	Sequence 30745, A	909	27	51.9	102	11	US-11-064-774A-817	Sequence 817, App
837	28	53.8	1475	11	US-11-096-568A-30744	Sequence 2, Appl1	910	27	51.9	102	11	US-11-064-774A-817	Sequence 817, App
838	28	53.8	1633	9	US-10-240-771A-2	Sequence 30743, A	911	27	51.9	102	11	US-11-064-774A-819	Sequence 819, App
839	28	53.8	1635	11	US-11-096-568A-30743	Sequence 56, Appl	912	27	51.9	102	11	US-11-064-774A-827	Sequence 827, App
840	28	53.8	1924	8	US-10-512-386-56	Sequence 276, App	913	27	51.9	102	11	US-11-064-774A-833	Sequence 833, App
841	28	53.8	2036	11	US-11-124-368A-276	Sequence 280, App	914	27	51.9	102	11	US-11-064-774A-835	Sequence 835, App
842	28	53.8	2036	11	US-11-124-368A-280	Sequence 281, App	915	27	51.9	102	11	US-11-064-774A-841	Sequence 841, App
843	28	53.8	2036	11	US-11-124-368A-281	Sequence 278, App	916	27	51.9	102	11	US-11-064-774A-843	Sequence 843, App
844	28	53.8	2044	11	US-11-124-368A-278	Sequence 277, App	917	27	51.9	102	11	US-11-064-774A-881	Sequence 881, App
845	28	53.8	2144	11	US-11-124-368A-277	Sequence 94, Appl	918	27	51.9	102	11	US-11-064-774A-883	Sequence 883, App
846	28	53.8	2214	11	US-11-080-991-94	Sequence 784, App	919	27	51.9	102	11	US-11-064-774A-889	Sequence 889, App
847	28	53.8	2671	8	US-10-505-928-764	Sequence 6, Appl1	920	27	51.9	102	11	US-11-064-774A-891	Sequence 891, App
848	28	53.8	2671	9	US-10-876-787-6	Sequence 6554, Ap	921	27	51.9	102	11	US-11-064-774A-897	Sequence 897, App
849	27.5	52.9	140	11	US-11-079-463-6554	Sequence 8492, Ap	922	27	51.9	102	11	US-11-064-774A-899	Sequence 899, App
850	27.5	52.9	382	11	US-11-087-009-8492	Sequence 488, App	923	27	51.9	102	11	US-11-064-774A-905	Sequence 905, App
851	27	51.9	11	9	US-10-530-061-488	Sequence 132, App	924	27	51.9	102	11	US-11-064-774A-907	Sequence 907, App
852	27	51.9	13	9	US-11-064-774A-132	Sequence 1700, Ap	925	27	51.9	102	11	US-11-064-774A-1209	Sequence 1209, Ap
853	27	51.9	15	9	US-10-530-061-1700	Sequence 334, App	926	27	51.9	102	11	US-11-064-774A-181	Sequence 181, App
854	27	51.9	30	9	US-10-986-501-334	Sequence 117, App	927	27	51.9	103	11	US-11-064-774A-183	Sequence 183, App
855	27	51.9	30	11	US-11-121-044A-117	Sequence 1702, Ap	928	27	51.9	103	11	US-11-064-774A-189	Sequence 189, App
856	27	51.9	33	9	US-10-995-561-537	Sequence 537, App	929	27	51.9	103	11	US-11-064-774A-191	Sequence 191, App
857	27	51.9	36	9	US-10-995-561-1702	Sequence 16, Appl	930	27	51.9	103	11	US-11-064-774A-197	Sequence 197, App
858	27	51.9	45	11	US-11-186-545-16	Sequence 1832, Ap	931	27	51.9	103	11	US-11-064-774A-199	Sequence 199, App
859	27	51.9	77	9	US-10-467-657-1832	Sequence 14, Appl	932	27	51.9	103	11	US-11-064-774A-205	Sequence 205, App
860	27	51.9	79	11	US-11-140-284-14	Sequence 2145, Ap	933	27	51.9	103	11	US-11-064-774A-207	Sequence 207, App
861	27	51.9	97	11	US-11-264-096-2145	Sequence 177, App	934	27	51.9	103	11	US-11-064-774A-245	Sequence 245, App
862	27	51.9	102	11	US-11-064-774A-177	Sequence 179, App	935	27	51.9	103	11	US-11-064-774A-247	Sequence 247, App
863	27	51.9	102	11	US-11-064-774A-179	Sequence 185, App	936	27	51.9	103	11	US-11-064-774A-253	Sequence 253, App
864	27	51.9	102	11	US-11-064-774A-185	Sequence 193, App	937	27	51.9	103	11	US-11-064-774A-255	Sequence 255, App
865	27	51.9	102	11	US-11-064-774A-187	Sequence 195, App	938	27	51.9	103	11	US-11-064-774A-261	Sequence 261, App
866	27	51.9	102	11	US-11-064-774A-193	Sequence 201, App	939	27	51.9	103	11	US-11-064-774A-263	Sequence 263, App
867	27	51.9	102	11	US-11-064-774A-195	Sequence 203, App	940	27	51.9	103	11	US-11-064-774A-269	Sequence 269, App
868	27	51.9	102	11	US-11-064-774A-201	Sequence 243, App	941	27	51.9	103	11	US-11-064-774A-271	Sequence 271, App
869	27	51.9	102	11	US-11-064-774A-203	Sequence 249, App	942	27	51.9	103	11	US-11-064-774A-309	Sequence 309, App
870	27	51.9	102	11	US-11-064-774A-241	Sequence 251, App	943	27	51.9	103	11	US-11-064-774A-311	Sequence 311, App
871	27	51.9	102	11	US-11-064-774A-243	Sequence 257, App	944	27	51.9	103	11	US-11-064-774A-317	Sequence 317, App
872	27	51.9	102	11	US-11-064-774A-249	Sequence 259, App	945	27	51.9	103	11	US-11-064-774A-319	Sequence 319, App
873	27	51.9	102	11	US-11-064-774A-251	Sequence 267, App	946	27	51.9	103	11	US-11-064-774A-325	Sequence 325, App
874	27	51.9	102	11	US-11-064-774A-257	Sequence 305, App	947	27	51.9	103	11	US-11-064-774A-327	Sequence 327, App
875	27	51.9	102	11	US-11-064-774A-259	Sequence 307, App	948	27	51.9	103	11	US-11-064-774A-333	Sequence 333, App
876	27	51.9	102	11	US-11-064-774A-265	Sequence 313, App	949	27	51.9	103	11	US-11-064-774A-335	Sequence 335, App
877	27	51.9	102	11	US-11-064-774A-267	Sequence 315, App	950	27	51.9	103	11	US-11-064-774A-373	Sequence 373, App
878	27	51.9	102	11	US-11-064-774A-305	Sequence 321, App	951	27	51.9	103	11	US-11-064-774A-375	Sequence 375, App
879	27	51.9	102	11	US-11-064-774A-307	Sequence 323, App	952	27	51.9	103	11	US-11-064-774A-381	Sequence 381, App
880	27	51.9	102	11	US-11-064-774A-313	Sequence 329, App	953	27	51.9	103	11	US-11-064-774A-383	Sequence 383, App
881	27	51.9	102	11	US-11-064-774A-315	Sequence 331, App	954	27	51.9	103	11	US-11-064-774A-389	Sequence 389, App
882	27	51.9	102	11	US-11-064-774A-321	Sequence 369, App	955	27	51.9	103	11	US-11-064-774A-391	Sequence 391, App
883	27	51.9	102	11	US-11-064-774A-323	Sequence 371, App	956	27	51.9	103	11	US-11-064-774A-397	Sequence 397, App
884	27	51.9	102	11	US-11-064-774A-329	Sequence 377, App	957	27	51.9	103	11	US-11-064-774A-399	Sequence 399, App
885	27	51.9	102	11	US-11-064-774A-331	Sequence 385, App	958	27	51.9	103	11	US-11-064-774A-693	Sequence 693, App
886	27	51.9	102	11	US-11-064-774A-369	Sequence 387, App	959	27	51.9	103	11	US-11-064-774A-695	Sequence 695, App
887	27	51.9	102	11	US-11-064-774A-371	Sequence 393, App	960	27	51.9	103	11	US-11-064-774A-701	Sequence 701, App
888	27	51.9	102	11	US-11-064-774A-377	Sequence 395, App	961	27	51.9	103	11	US-11-064-774A-703	Sequence 703, App
889	27	51.9	102	11	US-11-064-774A-379	Sequence 691, App	962	27	51.9	103	11	US-11-064-774A-709	Sequence 709, App
890	27	51.9	102	11	US-11-064-774A-385	Sequence 697, App	963	27	51.9	103	11	US-11-064-774A-711	Sequence 711, App
891	27	51.9	102	11	US-11-064-774A-387	Sequence 699, App	964	27	51.9	103	11	US-11-064-774A-717	Sequence 717, App
892	27	51.9	102	11	US-11-064-774A-393	Sequence 767, App	965	27	51.9	103	11	US-11-064-774A-719	Sequence 719, App
893	27	51.9	102	11	US-11-064-774A-395	Sequence 753, App	966	27	51.9	103	11	US-11-064-774A-757	Sequence 753, App
894	27	51.9	102	11	US-11-064-774A-689	Sequence 755, App	967	27	51.9	103	11	US-11-064-774A-759	Sequence 755, App
895	27	51.9	102	11	US-11-064-774A-691	Sequence 767, App	968	27	51.9	103	11	US-11-064-774A-765	Sequence 765, App
896	27	51.9	102	11	US-11-064-774A-697	Sequence 699, App	969	27	51.9	103	11	US-11-064-774A-767	Sequence 767, App
897	27	51.9	102	11	US-11-064-774A-699	Sequence 705, App	970	27	51.9	103	11	US-11-064-774A-767	Sequence 705, App

```

971 27 51.9 103 11 US-11-064-774A-773 Sequence 773, App
972 27 51.9 103 11 US-11-064-774A-775 Sequence 775, App
973 27 51.9 103 11 US-11-064-774A-781 Sequence 781, App
974 27 51.9 103 11 US-11-064-774A-783 Sequence 783, App
975 27 51.9 103 11 US-11-064-774A-821 Sequence 821, App
976 27 51.9 103 11 US-11-064-774A-823 Sequence 823, App
977 27 51.9 103 11 US-11-064-774A-829 Sequence 829, App
978 27 51.9 103 11 US-11-064-774A-831 Sequence 831, App
979 27 51.9 103 11 US-11-064-774A-837 Sequence 837, App
980 27 51.9 103 11 US-11-064-774A-839 Sequence 839, App
981 27 51.9 103 11 US-11-064-774A-845 Sequence 845, App
982 27 51.9 103 11 US-11-064-774A-847 Sequence 847, App
983 27 51.9 103 11 US-11-064-774A-885 Sequence 885, App
984 27 51.9 103 11 US-11-064-774A-887 Sequence 887, App
985 27 51.9 103 11 US-11-064-774A-893 Sequence 893, App
986 27 51.9 103 11 US-11-064-774A-895 Sequence 895, App
987 27 51.9 103 11 US-11-064-774A-901 Sequence 901, App
988 27 51.9 103 11 US-11-064-774A-903 Sequence 903, App
989 27 51.9 103 11 US-11-064-774A-909 Sequence 909, App
990 27 51.9 103 11 US-11-064-774A-911 Sequence 911, App
991 27 51.9 104 11 US-11-064-774A-433 Sequence 433, App
992 27 51.9 104 11 US-11-064-774A-435 Sequence 435, App
993 27 51.9 104 11 US-11-064-774A-441 Sequence 441, App
994 27 51.9 104 11 US-11-064-774A-443 Sequence 443, App
995 27 51.9 104 11 US-11-064-774A-449 Sequence 449, App
996 27 51.9 104 11 US-11-064-774A-451 Sequence 451, App
997 27 51.9 104 11 US-11-064-774A-457 Sequence 457, App
998 27 51.9 104 11 US-11-064-774A-459 Sequence 459, App
999 27 51.9 104 11 US-11-064-774A-497 Sequence 497, App
1000 27 51.9 104 11 US-11-064-774A-499 Sequence 499, App

```

ALIGNMENTS

```

RESULT 1
US-10-530-253-13
; Sequence 13, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 13
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-13

```

```

Query Match          100.0%; Score 52; DB 9; Length 151;
Best Local Similarity 100.0%; Pred. No. 0.01;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLLIRC 9
Db 95 PLCDLLIRC 103

```

```

RESULT 2
US-11-206-138-3
; Sequence 3, Application US/11206138
; Publication No. US20060039919A1

```

```

; GENERAL INFORMATION:
; APPLICANT: HealthBanks Biotech CO. LTD.
; TITLE OF INVENTION: Fusion protein for inhibiting cervical cancer
; FILE REFERENCE: P7819/0613
; CURRENT APPLICATION NUMBER: US/11/206,138
; CURRENT FILING DATE: 2005-08-18
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 3
; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-11-206-138-3

```

```

Query Match          100.0%; Score 52; DB 11; Length 158;
Best Local Similarity 100.0%; Pred. No. 0.01;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLLIRC 9
Db 102 PLCDLLIRC 110

```

```

RESULT 3
US-10-530-253-1
; Sequence 1, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-1

```

```

Query Match          100.0%; Score 52; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLLIRC 9
Db 95 PLCDLLIRC 103

```

```

RESULT 4
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929

```

;; PRIOR FILING DATE: 2002-10-03
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 3
;; LENGTH: 248
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 52; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||
Db 95 PLCDLLIRC 103

RESULT 5
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match 100.0%; Score 52; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||
Db 95 PLCDLLIRC 103

RESULT 6
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248

;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-10-530-253-7

Query Match 100.0%; Score 52; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||
Db 192 PLCDLLIRC 200

RESULT 7
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9

Query Match 100.0%; Score 52; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLLIRC 9
|||
Db 192 PLCDLLIRC 200

RESULT 8
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11

Query Match 100.0%; Score 52; DB 9; Length 248;

Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
| | | | |
Db 192 PLCDLLIRC 200

RESULT 9

US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANQ, XIAOMU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
; CURRENT APPLICATION NUMBER: US/11/192,923A
; PRIOR FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match 100.0%; Score 52; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.017;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLLIRC 9
| | | | |
Db 200 PLCDLLIRC 208

RESULT 10

US-10-530-061-497
; Sequence 497, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 497
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-497

Query Match 86.5%; Score 45; DB 9; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.018;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLLIRC 9
| | | | |
Db 2 LCDLLIRC 9

RESULT 11
US-10-530-253-23
; Sequence 23, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casaretti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 23
; LENGTH: 155
; TYPE: PRT
; ORGANISM: Human papillomavirus type 56
US-10-530-253-23

Query Match 86.5%; Score 45; DB 9; Length 155;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLLIRC 9
| | | | |
Db 99 LCDLLIRC 106

RESULT 12
US-10-530-253-16
; Sequence 16, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casaretti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 16
; LENGTH: 149
; TYPE: PRT
; ORGANISM: Human papillomavirus type 31
US-10-530-253-16

Query Match 82.7%; Score 43; DB 9; Length 149;
Best Local Similarity 87.5%; Pred. No. 0.49;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLLIRC 9
| | | | |
Db 96 LCDLLIRC 103

RESULT 13
US-11-096-568A-32096
; Sequence 32096, Application US/11096568A


```

; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 32096
; LENGTH: 838
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(838)
; OTHER INFORMATION: Ceres Seq. ID no. 15221081
US-11-096-568A-32096

```

```

Query Match      80.8%; Score 42; DB 11; Length 838;
Best Local Similarity 77.8%; Pred. No. 3.8;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLIRC 9
Db 145 PLCDVLRRC 153

```

```

RESULT 14
US-11-096-568A-32095
; Sequence 32095, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 32095
; LENGTH: 917
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(917)
; OTHER INFORMATION: Ceres Seq. ID no. 15221080
US-11-096-568A-32095

```

```

Query Match      80.8%; Score 42; DB 11; Length 917;
Best Local Similarity 77.8%; Pred. No. 4.2;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLIRC 9
Db 224 PLCDVLRRC 232

```

```

RESULT 15
US-11-096-568A-32094
; Sequence 32094, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 32094
; LENGTH: 949

```

```

; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(949)
; OTHER INFORMATION: Ceres Seq. ID no. 15221079
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: Xaa is any aa, unknown or other
US-11-096-568A-32094

```

```

Query Match      80.8%; Score 42; DB 11; Length 949;
Best Local Similarity 77.8%; Pred. No. 4.3;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLIRC 9
Db 256 PLCDVLRRC 264

```

```

RESULT 16
US-10-530-061-782
; Sequence 782, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-W
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 782
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-782

```

```

Query Match      73.1%; Score 38; DB 9; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.36;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 PLCDLIRC 7
Db 5 PLCDLIRC 11

```

```

RESULT 17
US-10-530-253-18
; Sequence 18, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M37-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03

```

NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 18
LENGTH: 149
TYPE: PRT
ORGANISM: Human papillomavirus type 35
US-10-530-253-18

Query Match 73.1%; Score 38; DB 9; Length 149;
Best Local Similarity 87.5%; Pred. No. 4.2;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCDLIRC 9
DB 96 LCHLLIRC 103

RESULT 18
US-10-530-061-642
Sequence 642, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 642
LENGTH: 9
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-642

Query Match 69.2%; Score 36; DB 9; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.9e+05;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLIRC 8
DB 3 LCDLIRC 9

RESULT 19
US-10-530-253-25
Sequence 25, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassecci, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/1004137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 160

TYPE: PRT
ORGANISM: Human papillomavirus type 59
US-10-530-253-25

Query Match 69.2%; Score 36; DB 9; Length 160;
Best Local Similarity 77.8%; Pred. No. 11;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 PLCDLIRC 9
DB 97 PLHLLIRC 105

RESULT 20
US-10-530-061-75
Sequence 75, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 75
LENGTH: 9
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-75

Query Match 67.3%; Score 35; DB 9; Length 9;
Best Local Similarity 87.5%; Pred. No. 1.9e+05;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCDLIRC 9
DB 1 LTRDLIRC 8

RESULT 21
US-10-530-061-126
Sequence 126, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 126
LENGTH: 9
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-126

Query Match 67.3%; Score 35; DB 9; Length 9;
Best Local Similarity 87.5%; Pred. No. 1.9e+05;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 LCDLIRC 9
| | | | |
| | | | |
Db 1 LTDLIRC 8

RESULT 22

US-11-079-463-10174
; Sequence 10174, Application US/11079463
; Publication No. US20060073161A1
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTERIOIDES FRA
; FILE REFERENCE: PAT#00-03DIV2
; CURRENT FILING DATE: 2005-03-14
; PRIOR APPLICATION NUMBER: US 60/128,705
; PRIOR FILING DATE: 1999-04-09
; PRIOR APPLICATION NUMBER: US 09/540,209
; PRIOR FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 10444
; SEQ ID NO 10174
; LENGTH: 183
; TYPE: PRT
; ORGANISM: B. fragilis
US-11-079-463-10174

Query Match 67.3%; Score 35; DB 11; Length 183;
Best Local Similarity 55.6%; Pred. No. 19;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
| | | | |
| | | | |
Db 64 PLTELIVRC 72

RESULT 23

US-11-087-099-11058
; Sequence 11058, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 11058
; LENGTH: 225
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(225)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-087-099-11058

Query Match 67.3%; Score 35; DB 11; Length 225;
Best Local Similarity 55.6%; Pred. No. 23;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
| | | | |
| | | | |
Db 22 PBCSIIIRC 30

RESULT 24

US-11-072-512-3074

; Sequence 3074, Application US/11072512
; Publication No. US20060029945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGALI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
; APPLICANT: HIO, YURI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: MAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: YAMASHITA, ICHIRO
; APPLICANT: SEKI, NAOHICO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTOKYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: Novel full length cDNA
; FILE REFERENCE: 084335-0191
; CURRENT APPLICATION NUMBER: US/11/072,512
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US 60/350,978
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: JP 2001-379298
; PRIOR FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3074
; LENGTH: 407
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-072-512-3074

Query Match 67.3%; Score 35; DB 11; Length 407;
Best Local Similarity 66.7%; Pred. No. 40;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 PLCDLIRC 9
| | | | |
| | | | |
Db 279 PRCITLIRC 287

RESULT 25

US-11-188-298-13965
; Sequence 13965, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 13965
; LENGTH: 550
; TYPE: PRT
; ORGANISM: Actinobacillus pleuropneumoniae serovar 1 str. 4074
US-11-188-298-13965

Query Match 67.3%; Score 35; DB 11; Length 550;
Best Local Similarity 85.7%; Pred. No. 53;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 CDLIRC 9
| | | | |
| | | | |
Db 263 CDLIRC 269

```
RESULT 26
US-11-188-298-9296
; Sequence 9296, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 9296
; LENGTH: 558
; TYPE: PRT
; ORGANISM: Haemophilus somnus 2336
US-11-188-298-9296

Query Match      67.3%; Score 35; DB 11; Length 558;
Best Local Similarity 85.7%; Pred. No. 54;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 CDLIRRC 9
      |||||
Db      269 CDLIRAC 275

RESULT 27
US-11-188-298-11552
; Sequence 11552, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 11552
; LENGTH: 558
; TYPE: PRT
; ORGANISM: Haemophilus somnus 123PT
US-11-188-298-11552

Query Match      67.3%; Score 35; DB 11; Length 558;
Best Local Similarity 85.7%; Pred. No. 54;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 CDLIRRC 9
      |||||
Db      269 CDLIRAC 275

RESULT 28
US-10-530-061-1680
; Sequence 1680, Application US/1053061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
```

```
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: Patent version 3.3
; SEQ ID NO 1680
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1680

Query Match      65.4%; Score 34; DB 9; Length 15;
Best Local Similarity 66.7%; Pred. No. 2.7;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 PLCDLIRRC 9
      ||::|||
Db      3 PLNEILIRRC 11

RESULT 29
US-10-530-253-17
; Sequence 17, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 17
; LENGTH: 149
; TYPE: PRT
; ORGANISM: Human papillomavirus type 33
US-10-530-253-17

Query Match      65.4%; Score 34; DB 9; Length 149;
Best Local Similarity 66.7%; Pred. No. 24;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 PLCDLIRRC 9
      ||::|||
Db      95 PLNEILIRRC 103

RESULT 30
US-11-098-686-11255
; Sequence 11255, Application US/11098686
; Publication No. US20060024696A1
; GENERAL INFORMATION:
; APPLICANT: Kapur, Vivek and Gebhart, Connie J.
; TITLE OF INVENTION: NUCLEIC ACID AND POLYPEPTIDE SEQUENCES
; FILE REFERENCE: 09531-126001
; CURRENT APPLICATION NUMBER: US/11/098,686
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31318
; PRIOR FILING DATE: 2003-10-01
; PRIOR APPLICATION NUMBER: US 60/416,395
; PRIOR FILING DATE: 2002-10-04
; NUMBER OF SEQ ID NOS: 11433
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11255
; LENGTH: 211
; TYPE: PRT
```

ORGANISM: Lawsonia intracellularis
US-11-098-686-11255

Query Match 65.4%; Score 34; DB 11; Length 211;
Best Local Similarity 85.7%; Pred. No. 33;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 PLCDLLI 7
DB 155 PLCDPLI 161

RESULT 31
US-11-087-099-11319
Sequence 11319, Application US/11087099
Publication No. US20060041961A1

GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 11319
LENGTH: 321
TYPE: PRT
ORGANISM: Caulobacter crescentus CB15
US-11-087-099-11319

Query Match 65.4%; Score 34; DB 11; Length 321;
Best Local Similarity 100.0%; Pred. No. 49;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 PLCDLL 6
DB 6 PLCDLL 11

RESULT 32
US-11-087-099-8723
Sequence 8723, Application US/11087099
Publication No. US20060041961A1

GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 8723
LENGTH: 392
TYPE: PRT
ORGANISM: Aspicarpa hitella
US-11-087-099-8723

Query Match 65.4%; Score 34; DB 11; Length 392;
Best Local Similarity 85.7%; Pred. No. 59;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLLIR 8
DB 236 LCDLLIR 242

RESULT 33
US-11-087-099-784
Sequence 784, Application US/11087099
Publication No. US20060041961A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099

CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 784
LENGTH: 393
TYPE: PRT
ORGANISM: Sporobolus giganteus
US-11-087-099-784

Query Match 65.4%; Score 34; DB 11; Length 393;
Best Local Similarity 85.7%; Pred. No. 59;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLLIR 8
DB 236 LCDLLIR 242

RESULT 34
US-11-087-099-11887
Sequence 11887, Application US/11087099
Publication No. US20060041961A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 11887
LENGTH: 394
TYPE: PRT
ORGANISM: Lardizabala bitermata
US-11-087-099-11887

Query Match 65.4%; Score 34; DB 11; Length 394;
Best Local Similarity 85.7%; Pred. No. 59;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 LCDLLIR 8
DB 237 LCDLLIR 243

RESULT 35
US-11-072-512-2810
Sequence 2810, Application US/11072512
Publication No. US20060029945A1
GENERAL INFORMATION:
APPLICANT: ISOGAI, TAKAO
APPLICANT: SUGIYAMA, TOMOYASU
APPLICANT: OTSUKI, TETSUJI
APPLICANT: WAKAMATSU, AI
APPLICANT: SATO, HIROYUKI
APPLICANT: ISHII, SHIZUKO
APPLICANT: YAMAMOTO, JUN-ICHI
APPLICANT: ISONO, YUUKO
APPLICANT: HIO, YUKI
APPLICANT: OTSUKA, KAORU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: SEKI, NAOHITO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: Novel full length cDNA
FILE REFERENCE: 084335-0191
CURRENT APPLICATION NUMBER: US/11/072,512
CURRENT FILING DATE: 2005-03-07
PRIOR APPLICATION NUMBER: US 60/350,978
PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: JP 2001-379298

;; PRIOR FILING DATE: 2001-11-05
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: Patentin Ver. 2.1
;; SEQ ID NO 2810
;; LENGTH: 795
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-11-072-512-2810

Query Match 65.4%; Score 34; DB 11; Length 795;
Best Local Similarity 85.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLIR 8
Db 313 LCDLIR 319

RESULT 36
US-10-530-061-643
; Sequence 643, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/W-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 643
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-643

Query Match 63.5%; Score 33; DB 9; Length 9;
Best Local Similarity 85.7%; Pred. No. 1.9e+05;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLIR 8
Db 3 LCDLIR 9

RESULT 37
US-11-188-298-4940
; Sequence 4940, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 4940
; LENGTH: 282
; TYPE: PRT
; ORGANISM: Microbulbifer degradans 2-40
US-11-188-298-4940

Query Match 63.5%; Score 33; DB 11; Length 282;

Best Local Similarity 50.0%; Pred. No. 66;
Matches 4; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 2 LCDLIR 9
Db 97 VCDLIVSC 104

RESULT 38
US-11-108-528-54
; Sequence 54, Application US/11108528
; Publication No. US20050261189A1
; GENERAL INFORMATION:
; APPLICANT: Larsen, Glenn
; APPLICANT: Marvin, Martha
; APPLICANT: Li, Dean Y.
; APPLICANT: Wang, Elizabeth
; APPLICANT: Chen, C. M. Amy
; APPLICANT: Shamah, Steven M.
; TITLE OF INVENTION: METHODS OF PROMOTING CARDIAC CELL
; FILE REFERENCE: HYDR-P01-041
; CURRENT APPLICATION NUMBER: US/11/108,528
; PRIOR FILING DATE: 2005-04-18
; PRIOR APPLICATION NUMBER: US 60/563,137
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 60/598,368
; PRIOR FILING DATE: 2004-08-02
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 54
; LENGTH: 350
; TYPE: PRT
; ORGANISM: Mouse
US-11-108-528-54

Query Match 63.5%; Score 33; DB 11; Length 350;
Best Local Similarity 55.6%; Pred. No. 82;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 PLCDLIR 9
Db 6 PVDLIVTC 14

RESULT 39
US-11-087-099-12421
; Sequence 12421, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; PRIOR FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 12421
; LENGTH: 393
; TYPE: PRT
; ORGANISM: Paniscum capillare
US-11-087-099-12421

Query Match 63.5%; Score 33; DB 11; Length 393;
Best Local Similarity 71.4%; Pred. No. 91;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LCDLIR 8
Db 236 LCDLIR 242

RESULT 40
US-11-087-099-12016

```
Sequence 12016, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 12016
; LENGTH: 1129
; TYPE: PRT
; ORGANISM: Petroselinum crispum
US-11-087-099-12016

Query Match      63.5%; Score 33; DB 11; Length 1129;
Best Local Similarity 85.7%; Pred. No. 2.5e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 LCDLIR 8
Db      417 LCDLIR 423

RESULT 41
US-11-108-172-1116
; Sequence 1116, Application US/1108172
; Publication No. US20050260177A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tonglong
; APPLICANT: Jiang, Yugu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Ajjun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick Thomas S.
; APPLICANT: Carter, Derrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C15
; CURRENT APPLICATION NUMBER: US/11/108,172
; CURRENT FILING DATE: 2005-04-15
; PRIOR APPLICATION NUMBER: US 10/025,380
; PRIOR FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: US 09/922,217
; PRIOR FILING DATE: 2001-08-03
; PRIOR APPLICATION NUMBER: US 09/833,263
; PRIOR FILING DATE: 2001-04-10
; PRIOR APPLICATION NUMBER: US 09/649,811
; PRIOR FILING DATE: 2000-08-28
; PRIOR APPLICATION NUMBER: US 09/609,448
; PRIOR FILING DATE: 2000-06-29
; PRIOR APPLICATION NUMBER: US 09/575,251
; PRIOR FILING DATE: 2000-05-19
; PRIOR APPLICATION NUMBER: US 09/519,444
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: US 09/504,629
; PRIOR FILING DATE: 2000-02-15
; PRIOR APPLICATION NUMBER: US 09/480,321
; PRIOR FILING DATE: 2000-01-10
; PRIOR APPLICATION NUMBER: US 09/476,296
; PRIOR FILING DATE: 1999-12-30
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1130
; SOFTWARE: FastSeq for Windows Version 4.0
```

```
; SEQ ID NO 1116
; LENGTH: 5405
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-108-172-1116

Query Match      63.5%; Score 33; DB 11; Length 5405;
Best Local Similarity 66.7%; Pred. No. 1.1e+03;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1 PCDLIR 9
Db      2409 PCDLIR 2417

RESULT 42
US-10-530-061-484
; Sequence 484, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALBESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033052/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 484
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-484
```

```
Query Match      61.5%; Score 32; DB 9; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4 DLLIRC 9
Db      1 DLLIRC 6

RESULT 43
US-11-144-947-389
; Sequence 389, Application US/11144947
; Publication No. US20060084082A1
; GENERAL INFORMATION:
; APPLICANT: Ruden et al.
; TITLE OF INVENTION: 186 Human Secreted proteins
; FILE REFERENCE: P2002P2C2
; CURRENT APPLICATION NUMBER: US/11/144,947
; CURRENT FILING DATE: 2005-06-06
; PRIOR APPLICATION NUMBER: 09/882,171
; PRIOR FILING DATE: 2005-06-03
; PRIOR APPLICATION NUMBER: 09/809,391
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/190,068
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 10/164,861
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: 09/149,476
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: PCT/US98/04493
; PRIOR FILING DATE: 1998-03-06
; PRIOR APPLICATION NUMBER: 60/040,162
```

```
/ PRIOR FILING DATE: 1997-03-07
/ PRIOR APPLICATION NUMBER: 60/040,333
/ PRIOR FILING DATE: 1997-03-07
/ PRIOR APPLICATION NUMBER: 60/038,621
/ PRIOR FILING DATE: 1997-03-07
/ PRIOR APPLICATION NUMBER: 60/040,626
/ PRIOR FILING DATE: 1997-03-07
/ Remaining Prior Application data removed - See file Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 761
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 389
/ LENGTH: 29
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-11-144-947-389
```

```
Query Match          61.5%; Score 32; DB 11; Length 29;
Best Local Similarity 71.4%; Pred. No. 12;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      1 PCDLLI 7
         |||||
Db      5 PYCDLLV 11
```

```
RESULT 44
US-10-530-253-39
/ Sequence 39, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casasetti, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 39
/ LENGTH: 152
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
/ FEATURE:
/ NAME/KEY: MISC_FEATURE
/ LOCATION: (1)..(152)
/ OTHER INFORMATION: where Xaa is any amino acid
US-10-530-253-39
```

```
Query Match          61.5%; Score 32; DB 9; Length 152;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      2 LCDLLIRC 9
         |||||
Db      98 LXBLLIRC 105
```

```
RESULT 45
US-11-072-512-2077
/ Sequence 2077, Application US/11072512
/ Publication No. US20060029945A1
/ GENERAL INFORMATION:
/ APPLICANT: ISOGAI, TAKAO
/ APPLICANT: SUGIYAMA, TOMOYASU
/ APPLICANT: OTSUKI, TETSUJI
/ APPLICANT: WAKAMATSU, AI
/ APPLICANT: SATO, HIROYUKI
```

```
/ APPLICANT: ISHII, SHIZUKO
/ APPLICANT: YAMAMOTO, JUN-ICHI
/ APPLICANT: ISONO, YUUKO
/ APPLICANT: HIO, YURI
/ APPLICANT: OTSUKA, KAORU
/ APPLICANT: NAGAI, KEIICHI
/ APPLICANT: IRIE, RYOTARO
/ APPLICANT: TAMECHIKA, ICHIRO
/ APPLICANT: SEKI, NAOHICO
/ APPLICANT: YOSHITAKA, TSUTOMU
/ APPLICANT: OTSUKA, MOTOKYUKI
/ APPLICANT: NAGAHARI, KENJI
/ APPLICANT: MASUHO, YASUHIKO
/ TITLE OF INVENTION: Novel full length cDNA
/ FILE REFERENCE: 084335-0191
/ CURRENT APPLICATION NUMBER: US/11/072,512
/ CURRENT FILING DATE: 2005-03-07
/ PRIOR APPLICATION NUMBER: US 60/350,978
/ PRIOR FILING DATE: 2002-01-25
/ PRIOR APPLICATION NUMBER: JP 2001-379298
/ PRIOR FILING DATE: 2001-11-05
/ NUMBER OF SEQ ID NOS: 4096
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 2077
/ LENGTH: 167
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-11-072-512-2077
```

```
Query Match          61.5%; Score 32; DB 11; Length 167;
Best Local Similarity 71.4%; Pred. No. 62;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy      3 CDLLIRC 9
         |||||
Db      71 CPLLLRC 77
```

```
RESULT 46
US-11-087-099-3371
/ Sequence 3371, Application US/11087099
/ Publication No. US20060041961A1
/ GENERAL INFORMATION:
/ APPLICANT: Abad, Mark S. et al.
/ TITLE OF INVENTION: Genes and Uses for Plant Improvement
/ FILE REFERENCE: 38-21(53450)B EP
/ CURRENT APPLICATION NUMBER: US/11/087,099
/ CURRENT FILING DATE: 2005-03-22
/ NUMBER OF SEQ ID NOS: 12464
/ SEQ ID NO 3371
/ LENGTH: 188
/ TYPE: PRT
/ ORGANISM: Carmichaelia sp. 'Lavin 6201'
US-11-087-099-3371
```

```
Query Match          61.5%; Score 32; DB 11; Length 188;
Best Local Similarity 71.4%; Pred. No. 70;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      2 LCDLLIR 8
         |||||
Db      171 LCDWLLR 177
```

```
RESULT 47
US-11-087-099-9142
/ Sequence 9142, Application US/11087099
/ Publication No. US20060041961A1
/ GENERAL INFORMATION:
/ APPLICANT: Abad, Mark S. et al.
/ TITLE OF INVENTION: Genes and Uses for Plant Improvement
/ FILE REFERENCE: 38-21(53450)B EP
/ CURRENT APPLICATION NUMBER: US/11/087,099
```


; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 9142
; LENGTH: 193
; TYPE: PRT
; ORGANISM: Enterolobium cyclocarpum
US-11-087-099-9142

Query Match 61.5%; Score 32; DB 11; Length 193;
Best Local Similarity 71.4%; Pred. No. 72;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 PLCDLIR 8
|||:|
Db 171 LCDMLR 177

RESULT 48
US-11-096-568A-13496
; Sequence 13496, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 13496
; LENGTH: 219
; TYPE: PRT
; ORGANISM: Triticum aestivum
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(219)
; OTHER INFORMATION: Ceres Seq. ID no. 15225255
US-11-096-568A-13496

Query Match 61.5%; Score 32; DB 11; Length 219;
Best Local Similarity 66.7%; Pred. No. 81;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 PLCDLIR 9
|||:|
Db 144 PLCKRLRRC 152

RESULT 49
US-11-096-568A-22356
; Sequence 22356, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 22356
; LENGTH: 227
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(227)
; OTHER INFORMATION: Ceres Seq. ID no. 12408616
US-11-096-568A-22356

Query Match 61.5%; Score 32; DB 11; Length 227;
Best Local Similarity 83.3%; Pred. No. 83;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PLCDLIR 6
|||:|
Db 112 PLCKDL 117

RESULT 50
US-11-096-568A-13495
; Sequence 13495, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 13495
; LENGTH: 228
; TYPE: PRT
; ORGANISM: Triticum aestivum
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(228)
; OTHER INFORMATION: Ceres Seq. ID no. 15225254
US-11-096-568A-13495

Query Match 61.5%; Score 32; DB 11; Length 228;
Best Local Similarity 66.7%; Pred. No. 84;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 PLCDLIR 9
|||:|
Db 153 PLCKRLRRC 161

Search completed: May 5, 2006, 07:45:54
Job time: 19.4 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 02:25:57 ; Search time 20.7 Seconds
(without alignments)
35.946 Million cell updates/sec

Title: US-08-170-344-13
Perfect score: 48
Sequence: 1 TLHEMYLDL 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/1aa/5-COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/6-COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/8-COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/PTMUS-COMB.pep:*
5: /cgn2_6/ptodata/1/1aa/RE-COMB.pep:*
6: /cgn2_6/ptodata/1/1aa/Backfill.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	48	100.0	9	1	US-08-187-547-105	Sequence 105, App
2	48	100.0	9	2	US-08-197-484-69	Sequence 69, App1
3	48	100.0	9	2	US-10-365-908-4	Sequence 4, App1
4	48	100.0	9	4	PCT-US95-02121-69	Sequence 69, App1
5	48	100.0	10	2	US-10-365-908-4	Sequence 49, App1
6	48	100.0	18	2	US-08-075-541D-34	Sequence 46, App1
7	48	100.0	20	1	US-08-934-915-46	Sequence 43, App1
8	48	100.0	20	2	US-08-075-541D-43	Sequence 44, App1
9	48	100.0	20	2	US-08-075-541D-44	Sequence 69, App1
10	48	100.0	20	2	US-09-980-177A-69	Sequence 14, App1
11	48	100.0	23	2	US-09-980-523A-14	Sequence 11, App1
12	48	100.0	30	1	US-08-363-586-1	Sequence 51, App1
13	48	100.0	30	1	US-08-934-915-51	Sequence 1, App1
14	48	100.0	30	2	US-09-486-394-1	Sequence 7, App1
15	48	100.0	30	2	US-09-828-645-3	Sequence 7, App1
16	48	100.0	30	2	US-09-828-645-7	Sequence 6, App1
17	48	100.0	98	1	US-08-406-248-6	Sequence 42, App1
18	48	100.0	98	2	US-08-075-541D-42	Sequence 1, App1
19	48	100.0	98	2	US-09-382-616A-1	Sequence 4, App1
20	48	100.0	98	2	US-08-944-368A-4	Sequence 4, App1
21	48	100.0	98	2	US-09-820-764-4	Sequence 8, App1
22	48	100.0	98	2	US-09-613-103-8	Sequence 19, App1
23	48	100.0	98	2	US-09-566-420-19	Sequence 4, App1
24	48	100.0	98	2	US-09-986-118A-4	Sequence 1, App1
25	48	100.0	98	2	US-09-728-466-1	Sequence 4, App1
26	48	100.0	98	2	US-09-824-017-4	Sequence 4, App1
27	48	100.0	98	2	US-10-267-311-8	Sequence 8, App1

28	100.0	98	2	US-10-201-764-19	Sequence 19, App1
29	100.0	98	2	US-09-637-746-3	Sequence 3, App1
30	100.0	98	2	US-09-501-097A-7	Sequence 7, App1
31	100.0	98	2	US-09-980-523A-12	Sequence 12, App1
32	100.0	98	2	US-09-613-303-12	Sequence 12, App1
33	100.0	121	2	US-10-267-311-12	Sequence 12, App1
34	100.0	172	2	US-08-860-165-12	Sequence 12, App1
35	100.0	172	2	US-09-359-382-12	Sequence 2, App1
36	100.0	185	2	US-09-462-993-2	Sequence 35, App1
37	100.0	198	2	US-09-613-303-35	Sequence 35, App1
38	100.0	198	2	US-10-267-311-35	Sequence 1, App1
39	100.0	220	2	US-09-485-885-8	Sequence 8, App1
40	100.0	220	2	US-09-485-885-1	Sequence 12, App1
41	100.0	253	1	US-08-889-666-20	Sequence 20, App1
42	100.0	253	1	US-08-465-078-20	Sequence 20, App1
43	100.0	253	1	US-08-725-776-20	Sequence 20, App1
44	100.0	253	1	US-08-488-062-20	Sequence 20, App1
45	100.0	253	1	US-08-117-083-9	Sequence 9, App1
46	100.0	263	1	US-08-860-165-10	Sequence 10, App1
47	100.0	266	2	US-09-359-382-10	Sequence 10, App1
48	100.0	266	2	US-09-613-303-25	Sequence 25, App1
49	100.0	266	2	US-10-267-311-25	Sequence 25, App1
50	100.0	287	2	US-09-501-097A-25	Sequence 25, App1
51	100.0	287	2	US-09-613-303-33	Sequence 33, App1
52	100.0	295	2	US-10-267-311-33	Sequence 25, App1
53	100.0	295	2	US-09-613-303-53	Sequence 53, App1
54	100.0	324	2	US-10-267-311-53	Sequence 29, App1
55	100.0	324	2	US-09-613-303-29	Sequence 29, App1
56	100.0	371	2	US-09-485-885-6	Sequence 6, App1
57	100.0	390	2	US-09-485-885-14	Sequence 14, App1
58	100.0	420	2	US-09-501-097A-22	Sequence 22, App1
59	100.0	430	2	US-09-613-303-19	Sequence 19, App1
60	100.0	493	2	US-10-267-311-19	Sequence 17, App1
61	100.0	639	2	US-09-613-303-17	Sequence 17, App1
62	100.0	639	2	US-10-267-311-17	Sequence 51, App1
63	100.0	641	2	US-09-613-303-51	Sequence 51, App1
64	100.0	641	2	US-10-267-311-51	Sequence 53, App1
65	100.0	647	2	US-09-613-303-53	Sequence 29, App1
66	100.0	647	2	US-10-267-311-53	Sequence 29, App1
67	100.0	648	2	US-09-613-303-29	Sequence 29, App1
68	100.0	648	2	US-10-267-311-29	Sequence 41, App1
69	100.0	711	2	US-09-613-303-41	Sequence 41, App1
70	100.0	711	2	US-10-267-311-41	Sequence 40, App1
71	100.0	723	2	US-09-501-097A-20	Sequence 45, App1
72	100.0	723	2	US-09-613-303-45	Sequence 45, App1
73	100.0	724	2	US-10-267-311-45	Sequence 152, App
74	100.0	724	2	US-08-934-915-152	Sequence 35, App1
75	89.6	20	1	US-08-075-541D-35	Sequence 11, App1
76	81.2	18	2	US-10-365-908-7	Sequence 16, App1
77	79.2	9	2	US-08-289-522E-3	Sequence 3, App1
78	79.2	113	2	US-09-452-239-16	Sequence 10, App1
79	72.9	401	2	US-08-289-522E-3	Sequence 10, App1
80	72.9	401	2	US-09-054-526B-3	Sequence 10, App1
81	72.9	495	1	US-08-455-559-10	Sequence 10, App1
82	72.9	495	1	US-09-145-060-10	Sequence 10, App1
83	72.9	495	4	PCT-US94-00657-10	Sequence 2, App1
84	72.9	501	1	US-08-288-508C-2	Sequence 1, App1
85	72.9	501	2	US-08-981-490B-1	Sequence 2, App1
86	72.9	501	2	US-09-386-450D-2	Sequence 2, App1
87	72.9	501	2	US-09-949-016-5956	Sequence 5956, App
88	72.9	556	2	US-09-902-540-13058	Sequence 13058, App
89	72.9	556	2	US-09-902-540-13058	Sequence 10132, App
90	72.9	579	9	US-07-909-016-10132	Sequence 7, App1
91	70.8	216	2	US-09-270-767-60948	Sequence 60948, App
92	68.8	520	2	US-09-270-767-45441	Sequence 45441, App
93	68.8	784	2	US-09-543-681A-7442	Sequence 7442, App
94	68.8	784	2	US-09-543-681A-7442	Sequence 15133, App
95	66.7	110	2	US-09-248-796A-15193	Sequence 2274, App
96	66.7	203	2	US-09-605-703B-2274	Sequence 60286, App
97	66.7	235	2	US-09-270-767-60286	Sequence 13813, App
98	66.7	250	2	US-09-902-540-13813	Sequence 44816, App
99	66.7	355	2	US-09-270-767-44816	Sequence 4772, App
100	66.7	417	2	US-09-328-352-4772	

101	32	66.7	472	2	US-09-605-703B-1400	Sequence 1400, Ap	174	30	62.5	677	1	US-08-522-269B-3	Sequence 3, Appli
102	32	66.7	472	2	US-09-605-703B-1426	Sequence 1426, Ap	175	30	62.5	677	2	US-09-294-923-3	Sequence 3, Appli
103	32	66.7	472	2	US-09-605-703B-1428	Sequence 1428, Ap	176	30	62.5	684	2	US-08-965-762-2	Sequence 2, Appli
104	32	66.7	624	2	US-09-877-730-24	Sequence 24, Appl	177	30	62.5	684	2	US-09-911-927-2	Sequence 2, Appli
105	32	66.7	686	2	US-09-328-352-4303	Sequence 4303, Ap	178	30	62.5	684	2	US-09-911-882-2	Sequence 2, Appli
106	32	66.7	703	2	US-09-198-452A-490	Sequence 490, App	179	30	62.5	684	2	US-09-911-888-2	Sequence 2, Appli
107	32	66.7	703	2	US-09-438-185A-460	Sequence 460, App	180	30	62.5	742	1	US-07-921-807B-2	Sequence 2, Appli
108	32	66.7	712	2	US-09-877-730-22	Sequence 22, Appl	181	30	62.5	742	1	US-08-441-944A-2	Sequence 2, Appli
109	32	66.7	793	2	US-09-877-730-28	Sequence 28, Appl	182	30	62.5	745	2	US-09-270-767-45481	Sequence 45481, A
110	32	66.7	966	2	US-08-868-786-2	Sequence 2, Appli	183	30	62.5	962	2	US-09-248-796A-19159	Sequence 19159, A
111	32	66.7	983	2	US-09-394-200-2	Sequence 2, Appli	184	30	62.5	1464	1	US-08-026-138E-1	Sequence 1, Appli
112	32	66.7	983	2	US-10-047-757-2	Sequence 2, Appli	185	30	62.5	1464	2	US-09-922-011-1	Sequence 1, Appli
113	32	66.7	991	2	US-09-877-730-12	Sequence 12, Appl	186	30	62.5	3074	2	US-09-543-681A-5508	Sequence 5508, Ap
114	32	66.7	1069	2	US-09-877-730-2	Sequence 2, Appli	187	29	60.4	9	2	US-10-365-908-45	Sequence 85, Appl
115	32	66.7	1072	2	US-09-877-730-18	Sequence 18, Appl	188	29	60.4	10	2	US-08-155-339A-80	Sequence 35, Appl
116	32	66.7	1150	2	US-09-877-730-8	Sequence 8, Appli	189	29	60.4	10	2	US-10-365-908-35	Sequence 35, Appl
117	32	66.7	1170	2	US-09-462-136-6	Sequence 6, Appli	190	29	60.4	29	2	US-09-270-767-18381	Sequence 38381, A
118	31	64.6	10	1	US-08-764-640-74	Sequence 74, Appl	191	29	60.4	29	2	US-09-270-767-53598	Sequence 53598, A
119	31	64.6	10	2	US-08-973-225-74	Sequence 74, Appl	192	29	60.4	55	2	US-09-361-707-83	Sequence 83, Appl
120	31	64.6	10	2	US-09-244-298A-74	Sequence 74, Appl	193	29	60.4	55	2	US-09-361-707-83	Sequence 84, Appl
121	31	64.6	10	2	US-09-516-704-74	Sequence 74, Appl	194	29	60.4	55	2	US-09-361-707-85	Sequence 85, Appl
122	31	64.6	10	2	US-09-549-090-74	Sequence 74, Appl	195	29	60.4	55	2	US-09-361-707-86	Sequence 86, Appl
123	31	64.6	10	2	US-09-832-230A-74	Sequence 74, Appl	196	29	60.4	55	2	US-09-361-707-87	Sequence 87, Appl
124	31	64.6	63	2	US-09-248-796A-26435	Sequence 26435, A	197	29	60.4	55	2	US-09-361-707-89	Sequence 89, Appl
125	31	64.6	95	1	US-08-455-896-7	Sequence 7, Appli	198	29	60.4	55	2	US-09-361-707-90	Sequence 90, Appl
126	31	64.6	95	1	US-08-933-148-7	Sequence 7, Appli	199	29	60.4	108	2	US-09-543-681A-4609	Sequence 4609, Ap
127	31	64.6	95	1	US-09-082-343-7	Sequence 7, Appli	200	29	60.4	120	2	US-09-270-767-45681	Sequence 46681, A
128	31	64.6	95	2	US-09-082-253-7	Sequence 7, Appli	201	29	60.4	122	2	US-09-621-976-3980	Sequence 3980, Ap
129	31	64.6	95	2	US-08-821-451A-27	Sequence 27, Appl	202	29	60.4	131	2	US-09-513-999C-4270	Sequence 4270, Ap
130	31	64.6	95	2	US-09-263-810-27	Sequence 27, Appl	203	29	60.4	131	2	US-09-198-452A-42	Sequence 42, Appl
131	31	64.6	95	2	US-09-583-169-27	Sequence 27, Appl	204	29	60.4	132	2	US-09-270-767-48378	Sequence 48378, A
132	31	64.6	95	2	US-09-162-622-7	Sequence 7, Appli	205	29	60.4	145	2	US-09-694-127-5	Sequence 5, Appli
133	31	64.6	95	2	US-09-509-015-7	Sequence 7, Appli	206	29	60.4	156	2	US-09-270-767-48299	Sequence 48299, A
134	31	64.6	95	2	US-09-985-911-27	Sequence 27, Appl	207	29	60.4	156	2	US-09-107-433-3384	Sequence 4384, Ap
135	31	64.6	95	4	PCR-US96-08235-7	Sequence 27, Appli	208	29	60.4	160	2	US-09-270-767-33082	Sequence 33082, A
136	31	64.6	100	2	US-09-134-001C-4673	Sequence 4673, Ap	209	29	60.4	191	2	US-09-443-011A-24	Sequence 24, Appl
137	31	64.6	124	2	US-09-621-976-4612	Sequence 4612, Ap	210	29	60.4	230	2	US-09-270-767-44142	Sequence 44142, A
138	31	64.6	128	1	US-08-946-528-5	Sequence 5, Appli	211	29	60.4	232	2	US-09-338-352-7274	Sequence 7274, Ap
139	31	64.6	128	1	US-09-513-998C-8060	Sequence 8060, Ap	212	29	60.4	237	2	US-09-538-092-404	Sequence 404, App
140	31	64.6	172	2	US-09-634-238-343	Sequence 343, App	213	29	60.4	240	2	US-09-248-796A-20107	Sequence 20107, A
141	31	64.6	233	2	US-09-270-767-32461	Sequence 32461, A	214	29	60.4	260	2	US-09-443-011A-10	Sequence 10, Appl
142	31	64.6	233	2	US-09-270-767-47678	Sequence 47678, A	215	29	60.4	283	2	US-09-252-991A-17335	Sequence 27535, A
143	31	64.6	234	2	US-09-107-532A-6523	Sequence 6523, Ap	216	29	60.4	284	2	US-09-489-039A-8001	Sequence 8001, Ap
144	31	64.6	253	2	US-09-107-532A-5072	Sequence 5072, Ap	217	29	60.4	285	2	US-09-769-787-11	Sequence 31, Appl
145	31	64.6	271	2	US-09-107-532A-5071	Sequence 5071, Ap	218	29	60.4	304	2	US-09-538-092-53	Sequence 53, Appl
146	31	64.6	305	2	US-09-634-238-320	Sequence 320, App	219	29	60.4	306	2	US-09-583-110-2708	Sequence 2708, Ap
147	31	64.6	348	2	US-09-134-000C-4770	Sequence 4770, Ap	220	29	60.4	309	2	US-09-522-714-10	Sequence 10, Appl
148	31	64.6	425	2	US-09-634-238-321	Sequence 321, App	221	29	60.4	315	2	US-09-438-185A-26	Sequence 26, Appl
149	31	64.6	810	2	US-09-538-092-5596	Sequence 5596, App	222	29	60.4	317	2	US-09-328-352-7345	Sequence 7345, Ap
150	31	64.6	1001	2	US-09-248-796A-17779	Sequence 17779, A	223	29	60.4	326	2	US-09-345-473E-10	Sequence 10, Appl
151	31	64.6	1060	2	US-09-248-796A-16624	Sequence 16624, A	224	29	60.4	326	2	US-09-862-027-10	Sequence 10, Appl
152	30	62.5	43	2	US-08-857-076-77	Sequence 77, Appl	225	29	60.4	337	2	US-09-198-452A-664	Sequence 664, App
153	30	62.5	43	2	US-09-205-658-77	Sequence 77, Appl	226	29	60.4	344	2	US-09-389-341-72	Sequence 72, Appl
154	30	62.5	55	2	US-09-361-707-88	Sequence 88, Appl	227	29	60.4	358	2	US-09-248-796A-19596	Sequence 19596, A
155	30	62.5	60	2	US-09-248-796A-25586	Sequence 25586, A	228	29	60.4	369	2	US-09-252-991A-16883	Sequence 16883, A
156	30	62.5	87	2	US-09-328-352-7003	Sequence 7003, Ap	229	29	60.4	379	2	US-09-160-827-12	Sequence 12, Appl
157	30	62.5	95	2	US-09-248-796A-27170	Sequence 27170, Ap	230	29	60.4	390	2	US-09-543-681A-7466	Sequence 7466, Ap
158	30	62.5	137	2	US-09-270-767-32791	Sequence 32791, A	231	29	60.4	392	2	US-09-438-185A-628	Sequence 628, App
159	30	62.5	137	2	US-09-270-767-48008	Sequence 48008, A	232	29	60.4	408	2	US-09-107-532A-3913	Sequence 3913, App
160	30	62.5	139	2	US-09-828-523A-24	Sequence 24, Appl	233	29	60.4	414	2	US-09-949-016-11685	Sequence 11695, A
161	30	62.5	148	2	US-09-828-523A-94	Sequence 94, Appl	234	29	60.4	414	2	US-09-605-703B-908	Sequence 908, App
162	30	62.5	149	2	US-09-513-998C-4897	Sequence 4897, Ap	235	29	60.4	418	2	US-09-688-1888-99	Sequence 99, Appl
163	30	62.5	222	2	US-09-248-796A-19120	Sequence 19120, A	236	29	60.4	418	2	US-09-291-417D-99	Sequence 99, Appl
164	30	62.5	375	2	US-09-248-796A-15348	Sequence 15348, A	237	29	60.4	429	2	US-09-270-767-45937	Sequence 45937, A
165	30	62.5	400	2	US-09-252-991A-32149	Sequence 32149, A	238	29	60.4	434	2	US-09-408-020-14	Sequence 14, Appl
166	30	62.5	427	2	US-09-107-532A-4479	Sequence 4479, Ap	239	29	60.4	443	2	US-09-408-020-16	Sequence 46, Appl
167	30	62.5	441	2	US-09-270-767-60990	Sequence 60990, A	240	29	60.4	449	2	US-09-270-767-77465	Sequence 77465, A
168	30	62.5	477	2	US-09-134-000C-4388	Sequence 4388, Ap	241	29	60.4	449	3	US-09-041-075A-21	Sequence 21, Appl
169	30	62.5	482	2	US-09-949-016-9805	Sequence 9805, Ap	242	29	60.4	462	2	US-09-165-241-1	Sequence 11, Appl
170	30	62.5	502	1	US-08-328-322-21	Sequence 21, Appl	243	29	60.4	462	2	US-10-012-231A-212	Sequence 212, App
171	30	62.5	510	1	US-08-328-322-21	Sequence 21, Appl	244	29	60.4	462	2	US-10-015-389A-212	Sequence 212, App
172	30	62.5	536	2	US-09-922-011-2	Sequence 2, Appli	245	29	60.4	462	2	US-10-006-768A-212	Sequence 212, App
173	30	62.5	604	1	US-08-328-322-12	Sequence 12, Appl	246	29	60.4	462	2	US-10-015-671A-212	Sequence 212, App

247	29	60.4	462	2	US-10-015-393A-212	Sequence 212, App	320	28	58.3	226	2	US-08-495-819B-7	Sequence 7, Appl1
248	29	60.4	462	2	US-10-011-833A-212	Sequence 212, App	321	28	58.3	229	2	US-09-710-279-2818	Sequence 2818, Ap
249	29	60.4	462	2	US-10-006-041A-212	Sequence 212, App	322	28	58.3	233	2	US-09-543-661A-8339	Sequence 8339, Ap
250	29	60.4	462	2	US-10-012-064A-212	Sequence 212, App	323	28	58.3	238	2	US-09-589-733C-14	Sequence 14, Appl
251	29	60.4	532	2	US-09-252-991A-30492	Sequence 30492, A	324	28	58.3	246	1	US-07-828-798C-6	Sequence 6, Appl1
252	29	60.4	601	2	US-09-270-767-42194	Sequence 42194, A	325	28	58.3	246	1	US-08-315-868A-6	Sequence 6, Appl1
253	29	60.4	602	2	US-09-569-037-6	Sequence 6, Appl1	326	28	58.3	246	2	US-08-495-819B-6	Sequence 6, Appl1
254	29	60.4	638	2	US-09-252-991A-35205	Sequence 25205, A	327	28	58.3	246	2	US-09-589-733C-15	Sequence 15, Appl
255	29	60.4	658	2	US-09-248-796A-20278	Sequence 20278, A	328	28	58.3	251	2	US-09-248-796A-14819	Sequence 14819, A
256	29	60.4	664	2	US-09-605-703B-906	Sequence 906, App	329	28	58.3	257	2	US-09-489-039A-7490	Sequence 7490, Ap
257	29	60.4	684	2	US-09-134-001C-4775	Sequence 4775, Ap	330	28	58.3	260	2	US-09-443-041A-26	Sequence 26, Appl
258	29	60.4	710	2	US-09-489-039A-14121	Sequence 14121, A	331	28	58.3	263	2	US-09-328-352-7488	Sequence 7488, Ap
259	29	60.4	720	2	US-09-583-110-2940	Sequence 2940, Ap	332	28	58.3	267	2	US-09-270-767-60274	Sequence 60274, A
260	29	60.4	754	2	US-09-107-433-4193	Sequence 4193, Ap	333	28	58.3	273	2	US-09-540-226-2577	Sequence 2577, Ap
261	29	60.4	754	2	US-09-328-352-6501	Sequence 6501, Ap	334	28	58.3	273	2	US-09-248-796A-15131	Sequence 15131, A
262	29	60.4	778	2	US-10-104-047-3477	Sequence 3477, Ap	335	28	58.3	274	2	US-10-104-047-1108	Sequence 3108, Ap
263	29	60.4	780	2	US-09-785-381-11	Sequence 11, Appl	336	28	58.3	275	2	US-09-489-039A-9858	Sequence 9858, Ap
264	29	60.4	790	2	US-09-949-016-6714	Sequence 6714, Ap	337	28	58.3	276	2	US-10-104-047-2544	Sequence 20456, A
265	29	60.4	812	2	US-09-489-039A-14282	Sequence 14282, A	338	28	58.3	279	2	US-09-248-796A-20456	Sequence 5047, Ap
266	29	60.4	812	2	US-09-949-016-11435	Sequence 11435, A	339	28	58.3	289	2	US-09-543-661A-5047	Sequence 5047, Ap
267	29	60.4	822	2	US-09-540-236-1951	Sequence 1951, Ap	340	28	58.3	292	2	US-09-515-558B-19	Sequence 19, Appl
268	29	60.4	841	2	US-09-252-991A-33134	Sequence 33134, A	341	28	58.3	292	2	US-09-519-223-19	Sequence 19, Appl
269	29	60.4	878	2	US-08-941-936-2	Sequence 2, Appl1	342	28	58.3	294	1	US-09-927-160-19	Sequence 19, Appl
270	29	60.4	974	1	US-08-868-786-6	Sequence 6, Appl1	343	28	58.3	294	1	US-08-874-347-26	Sequence 26, Appl
271	29	60.4	979	1	US-10-104-047-2446	Sequence 2446, Ap	344	28	58.3	294	2	US-09-093-552-26	Sequence 26, Appl
272	29	60.4	987	1	US-08-436-054-6	Sequence 6, Appl1	345	28	58.3	294	2	US-08-093-726-4	Sequence 4, Appl1
273	29	60.4	987	4	PCT-US95-08812-6	Sequence 6, Appl1	346	28	58.3	298	1	US-08-096-043-4	Sequence 4, Appl1
274	29	60.4	990	2	US-09-949-016-7235	Sequence 7235, Ap	347	28	58.3	298	1	US-08-093-577-4	Sequence 4, Appl1
275	29	60.4	990	2	US-09-415-522-8	Sequence 8, Appl1	348	28	58.3	298	1	US-08-096-623A-4	Sequence 1, Appl1
276	29	60.4	1013	2	US-09-540-236-3740	Sequence 3740, Ap	349	28	58.3	302	1	US-07-783-705A-1	Sequence 30761, A
277	29	60.4	1271	2	US-09-252-991A-20386	Sequence 20386, A	350	28	58.3	302	2	US-09-252-991A-0761	Sequence 11, Appl
278	29	60.4	1274	2	US-08-822-616-24	Sequence 24, Appl	351	28	58.3	303	2	US-09-100-804-11	Sequence 11, Appl
279	29	60.4	1276	1	US-08-446-648-24	Sequence 24, Appl	352	28	58.3	307	1	US-08-095-726-2	Sequence 2, Appl1
280	29	60.4	1276	2	US-09-982-610-24	Sequence 24, Appl	353	28	58.3	307	1	US-08-096-043-2	Sequence 2, Appl1
281	29	60.4	1276	2	PCT-US95-04228-24	Sequence 24, Appl	354	28	58.3	307	1	US-08-093-577-2	Sequence 2, Appl1
282	29	60.4	1276	4	PCT-US95-04228-24	Sequence 24, Appl	355	28	58.3	307	1	US-08-096-623A-2	Sequence 2, Appl1
283	29	60.4	1281	2	US-09-489-039A-10396	Sequence 10396, A	356	28	58.3	315	2	US-08-096-623A-2	Sequence 10061, A
284	29	60.4	1282	2	US-09-489-039A-9644	Sequence 9644, Ap	357	28	58.3	315	2	US-09-902-554-10661	Sequence 2816, Ap
285	29	60.4	1783	2	US-09-362-336A-2	Sequence 2, Appl1	358	28	58.3	321	2	US-09-801-861-8	Sequence 8, Appl1
286	29	60.4	1804	2	US-09-362-336A-4	Sequence 4, Appl1	359	28	58.3	330	2	US-09-801-861-9	Sequence 9, Appl1
287	29	60.4	2787	2	US-09-345-041-15	Sequence 15, Appl	360	28	58.3	330	2	US-09-801-861-10	Sequence 10, Appl
288	29	60.4	2787	2	US-09-358-055B-15	Sequence 15, Appl	361	28	58.3	330	2	US-10-224-562-9	Sequence 9, Appl1
289	29	60.4	2787	2	US-09-358-055B-15	Sequence 15, Appl	362	28	58.3	330	2	US-10-224-562-8	Sequence 8, Appl1
290	29	60.4	3174	1	US-08-477-451-3	Sequence 3, Appl1	363	28	58.3	330	2	US-10-224-562-9	Sequence 9, Appl1
291	29	60.4	3174	1	US-08-477-451-3	Sequence 3, Appl1	364	28	58.3	330	2	US-10-224-562-8	Sequence 10, Appl
292	29	60.4	5588	2	US-09-336-987A-6	Sequence 6, Appl1	365	28	58.3	330	2	US-10-786-065-8	Sequence 8, Appl1
293	29	60.4	5588	2	US-09-370-700-6	Sequence 6, Appl1	366	28	58.3	330	2	US-10-786-065-9	Sequence 9, Appl1
294	29	60.4	5588	2	US-09-603-207-6	Sequence 6, Appl1	367	28	58.3	330	2	US-10-786-065-10	Sequence 10, Appl
295	29	60.4	5588	2	US-09-621-576-6581	Sequence 6581, Ap	368	28	58.3	334	2	US-09-543-661A-4753	Sequence 4753, Ap
296	29	60.4	57	2	US-09-513-999C-5828	Sequence 5828, Ap	369	28	58.3	334	2	US-09-489-039A-12973	Sequence 12973, A
297	29	60.4	57	2	US-09-513-999C-7077	Sequence 7077, Ap	370	28	58.3	336	2	US-09-252-991A-24656	Sequence 24656, A
298	29	60.4	66	2	US-09-621-976-6696	Sequence 6696, Ap	371	28	58.3	336	2	US-09-270-767-41812	Sequence 41812, A
299	29	60.4	66	2	US-09-471-376-1583	Sequence 1583, Ap	372	28	58.3	336	2	US-09-134-001C-3258	Sequence 3258, Ap
300	29	60.4	67	2	US-09-513-999C-7282	Sequence 7282, Ap	373	28	58.3	340	2	US-09-602-777A-436	Sequence 436, App
301	29	60.4	74	2	US-09-338-352-4428	Sequence 4428, Ap	374	28	58.3	348	2	US-09-252-991A-32992	Sequence 22992, A
302	29	60.4	81	1	US-09-014-969-32	Sequence 32, Appl	375	28	58.3	350	2	US-09-328-352-5005	Sequence 5005, Ap
303	29	60.4	85	2	US-08-311-731A-100	Sequence 100, App	376	28	58.3	350	2	US-09-248-796A-15286	Sequence 15286, A
304	29	60.4	130	2	US-09-673-395A-523	Sequence 523, App	377	28	58.3	365	2	US-09-583-110-3098	Sequence 3098, Ap
305	29	60.4	132	2	US-09-125-642C-15	Sequence 15, Appl	378	28	58.3	368	2	US-09-107-433-4709	Sequence 4709, Ap
306	29	60.4	132	2	US-09-431-888-11	Sequence 11, Appl	379	28	58.3	371	1	US-08-673-789-14	Sequence 14, Appl
307	29	60.4	133	2	US-09-431-888-2	Sequence 2, Appl1	380	28	58.3	375	2	US-09-134-000C-5852	Sequence 5852, Ap
308	29	60.4	150	2	US-09-270-767-46536	Sequence 46536, A	381	28	58.3	378	2	US-09-270-767-32028	Sequence 32028, A
309	29	60.4	150	2	US-09-513-999C-6406	Sequence 6406, Ap	382	28	58.3	378	2	US-09-770-767-41745	Sequence 41745, A
310	29	60.4	177	2	US-09-614-912-28	Sequence 28, Appl	383	28	58.3	383	2	US-09-248-796A-20241	Sequence 20241, A
311	29	60.4	180	2	US-09-248-796A-16904	Sequence 16904, A	384	28	58.3	386	2	US-08-553-367A-2	Sequence 367A, A
312	29	60.4	199	2	US-08-737-248-9	Sequence 9, Appl1	385	28	58.3	386	2	US-09-295-306-2	Sequence 306-2
313	29	60.4	212	2	US-09-248-796A-22355	Sequence 22355, A	386	28	58.3	386	2	US-09-734-719-2	Sequence 719-2
314	29	60.4	212	2	US-09-134-001C-5069	Sequence 5069, Ap	387	28	58.3	387	2	US-09-371-307-78	Sequence 307, Ap
315	29	60.4	212	2	US-09-710-279-1628	Sequence 1628, Ap	388	28	58.3	393	1	US-09-352-991A-21484	Sequence 21484, A
316	29	60.4	223	2	US-09-710-279-1966	Sequence 1966, Ap	389	28	58.3	393	1	US-08-429-742-2	Sequence 2, Appl1
317	29	60.4	223	2	US-09-411-578-3	Sequence 3, Appl1	390	28	58.3	397	2	US-09-252-991A-28371	Sequence 28371, A
318	29	60.4	223	2	US-09-749-233-3	Sequence 7, Appl1	391	28	58.3	411	2	US-09-949-016-11445	Sequence 11445, A
319	29	60.4	226	1	US-07-828-798C-7	Sequence 7, Appl1	392	28	58.3	411	2	US-09-270-767-57994	Sequence 57994, A

393	28	58.3	414	2	US-09-608-917A-4	Sequence 4, Appli	466	28	58.3	951	1	US-08-162-809-2	Sequence 2, Appli
394	28	58.3	415	2	US-09-328-352-4699	Sequence 4699, Ap	467	28	58.3	970	1	US-08-673-789-7	Sequence 7, Appli
395	28	58.3	417	2	US-09-107-532A-6148	Sequence 1148, Ap	468	28	58.3	970	1	US-08-449-645A-11	Sequence 11, Appli
396	28	58.3	423	2	US-08-855-910-13	Sequence 13, Appli	469	28	58.3	970	1	US-08-702-367A-11	Sequence 11, Appli
397	28	58.3	423	2	US-09-206-344A-2	Sequence 2, Appli	470	28	58.3	970	4	PCT-US95-04681-11	Sequence 11, Appli
398	28	58.3	423	2	US-09-206-344A-4	Sequence 4, Appli	471	28	58.3	973	1	US-08-162-809-10	Sequence 10, Appli
399	28	58.3	427	2	US-09-134-000C-5142	Sequence 5142, Ap	472	28	58.3	984	2	US-08-673-789-6	Sequence 6, Appli
400	28	58.3	428	2	US-09-134-001C-5203	Sequence 5203, Ap	473	28	58.3	984	2	US-09-949-016-6502	Sequence 6502, Ap
401	28	58.3	430	2	US-09-198-452A-497	Sequence 497, App	474	28	58.3	986	1	US-08-673-789-3	Sequence 3, Appli
402	28	58.3	430	2	US-09-438-185A-465	Sequence 465, App	475	28	58.3	986	1	US-08-449-645A-15	Sequence 15, Appli
403	28	58.3	446	2	US-09-543-681A-6657	Sequence 6657, Ap	476	28	58.3	986	4	US-08-702-367A-15	Sequence 15, Appli
404	28	58.3	447	1	US-08-370-193A-11	Sequence 11, Appli	477	28	58.3	988	1	PCT-US95-04681-15	Sequence 15, Appli
405	28	58.3	447	1	US-08-886-640-3	Sequence 3, Appli	478	28	58.3	988	1	US-08-162-809-1	Sequence 1, Appli
406	28	58.3	447	2	US-08-884-235-11	Sequence 11, Appli	479	28	58.3	991	2	US-09-689-486-52	Sequence 52, Appli
407	28	58.3	452	2	US-09-489-039A-7937	Sequence 7937, Ap	480	28	58.3	992	2	US-09-689-486-5	Sequence 5, Appli
408	28	58.3	454	2	US-09-198-452A-197	Sequence 197, App	481	28	58.3	992	2	US-09-689-486-53	Sequence 53, Appli
409	28	58.3	457	2	US-09-438-185A-184	Sequence 184, App	482	28	58.3	993	1	US-08-348-143-1	Sequence 1, Appli
410	28	58.3	460	2	US-09-248-796A-18517	Sequence 18517, A	483	28	58.3	993	1	US-08-571-785-1	Sequence 1, Appli
411	28	58.3	468	2	US-09-248-796A-27314	Sequence 27314, A	484	28	58.3	993	2	US-08-368-776A-11	Sequence 11, Appli
412	28	58.3	483	2	US-09-905-999-20	Sequence 20, Appli	485	28	58.3	993	2	US-09-192-435-1	Sequence 1, Appli
413	28	58.3	484	2	US-09-270-767-42675	Sequence 42675, A	486	28	58.3	993	2	US-09-358-340-1	Sequence 1, Appli
414	28	58.3	484	2	US-09-538-092-101	Sequence 101, App	487	28	58.3	994	2	US-08-542-635-2	Sequence 2, Appli
415	28	58.3	507	2	US-09-252-991A-17308	Sequence 17308, A	488	28	58.3	994	2	US-08-368-776A-12	Sequence 12, Appli
416	28	58.3	521	2	US-09-902-540-14904	Sequence 14904, A	489	28	58.3	995	1	US-08-162-809-18	Sequence 18, Appli
417	28	58.3	547	2	US-09-543-681A-6530	Sequence 6530, Ap	490	28	58.3	995	1	US-08-673-789-5	Sequence 5, Appli
418	28	58.3	552	2	US-09-107-532A-4865	Sequence 4865, Ap	491	28	58.3	997	2	US-09-949-016-7171	Sequence 7171, Ap
419	28	58.3	555	2	US-09-107-532A-4722	Sequence 4722, Ap	492	28	58.3	998	1	US-08-449-645A-17	Sequence 17, Appli
420	28	58.3	559	2	US-09-489-039A-12509	Sequence 12509, A	493	28	58.3	998	1	US-08-449-645A-20	Sequence 20, Appli
421	28	58.3	570	2	US-09-923-684-4	Sequence 4, Appli	494	28	58.3	998	1	US-08-702-367A-17	Sequence 17, Appli
422	28	58.3	580	1	US-08-309-512-6	Sequence 6, Appli	495	28	58.3	998	1	US-08-368-776A-20	Sequence 2, Appli
423	28	58.3	584	4	PCT-US92-08756A-6	Sequence 6, Appli	496	28	58.3	998	2	US-08-368-776A-2	Sequence 2, Appli
424	28	58.3	590	2	US-09-252-991A-20345	Sequence 20345, A	497	28	58.3	998	4	US-09-949-016-6501	Sequence 6501, Ap
425	28	58.3	599	1	US-08-954-333-7	Sequence 7, Appli	498	28	58.3	998	4	PCT-US95-04681-17	Sequence 17, Appli
426	28	58.3	610	2	US-09-248-796A-17399	Sequence 17399, A	499	28	58.3	998	4	PCT-US95-04681-20	Sequence 20, Appli
427	28	58.3	622	2	US-09-902-540-11017	Sequence 11017, A	500	28	58.3	998	4	PCT-US96-00419-2	Sequence 2, Appli
428	28	58.3	623	2	US-09-396-149-2	Sequence 2, Appli	501	28	58.3	1005	2	US-09-949-016-6968	Sequence 6688, Ap
429	28	58.3	626	2	US-09-489-039A-9106	Sequence 9106, Ap	502	28	58.3	1005	2	US-09-949-016-9901	Sequence 9901, Ap
430	28	58.3	644	2	US-09-538-092-385	Sequence 385, App	503	28	58.3	1005	2	US-09-949-016-10620	Sequence 10620, A
431	28	58.3	660	2	US-09-134-001C-5039	Sequence 5039, Ap	504	28	58.3	1011	1	US-08-162-809-12	Sequence 12, Appli
432	28	58.3	667	2	US-09-923-684-3	Sequence 3, Appli	505	28	58.3	1032	2	US-09-489-039A-14025	Sequence 14025, A
433	28	58.3	685	2	US-10-029-180-82	Sequence 82, Appli	506	28	58.3	1082	2	US-09-538-092-533	Sequence 533, App
434	28	58.3	686	2	US-09-248-796A-18636	Sequence 18636, A	507	28	58.3	1104	1	US-08-232-616-36	Sequence 36, Appli
435	28	58.3	687	1	US-08-555-568B-21	Sequence 21, Appli	508	28	58.3	1104	2	US-08-446-648-36	Sequence 36, Appli
436	28	58.3	687	2	US-09-519-223-21	Sequence 21, Appli	509	28	58.3	1104	2	US-09-982-610-36	Sequence 36, Appli
437	28	58.3	687	2	US-09-927-180-21	Sequence 21, Appli	510	28	58.3	1104	4	PCT-US95-04228-36	Sequence 36, Appli
438	28	58.3	688	1	US-08-555-568B-23	Sequence 23, Appli	511	28	58.3	1184	1	US-08-918-914-1	Sequence 1, Appli
439	28	58.3	688	2	US-09-519-223-23	Sequence 23, Appli	512	28	58.3	1184	2	US-08-996-083-3	Sequence 3, Appli
440	28	58.3	688	2	US-09-927-180-23	Sequence 23, Appli	513	28	58.3	1184	2	US-09-991-181-124	Sequence 124, App
441	28	58.3	694	2	US-09-328-352-7835	Sequence 7835, Ap	514	28	58.3	1184	2	US-09-990-444-124	Sequence 124, App
442	28	58.3	738	2	US-09-107-532A-5096	Sequence 5096, Ap	515	28	58.3	1184	2	US-09-997-333-124	Sequence 124, App
443	28	58.3	802	2	US-10-012-231A-260	Sequence 260, App	516	28	58.3	1184	2	US-09-992-598-124	Sequence 124, App
444	28	58.3	802	2	US-10-015-389A-260	Sequence 260, App	517	28	58.3	1246	2	US-09-252-991A-23140	Sequence 23140, A
445	28	58.3	802	2	US-10-006-768A-260	Sequence 260, App	518	28	58.3	1246	2	US-09-949-016-10970	Sequence 10970, A
446	28	58.3	802	2	US-10-015-671A-260	Sequence 260, App	519	28	58.3	2465	1	US-08-596-291-3	Sequence 3, Appli
447	28	58.3	802	2	US-10-015-393A-260	Sequence 260, App	520	28	58.3	2465	2	US-09-100-804-3	Sequence 3, Appli
448	28	58.3	802	2	US-10-011-833A-260	Sequence 260, App	521	28	58.3	2466	2	US-09-080-855-12	Sequence 12, Appli
449	28	58.3	802	2	US-10-006-041A-260	Sequence 260, App	522	28	58.3	2466	2	US-09-566-076-12	Sequence 12, Appli
450	28	58.3	802	2	US-10-012-064A-260	Sequence 260, App	523	28	58.3	2466	4	PCT-US94-09943-2	Sequence 2, Appli
451	28	58.3	819	2	US-09-949-016-10948	Sequence 10948, A	524	28	58.3	2485	2	US-09-290-640-46	Sequence 46, Appli
452	28	58.3	849	1	US-08-162-809-6	Sequence 6, Appli	525	28	58.3	2485	2	US-09-665-615B-46	Sequence 46, Appli
453	28	58.3	849	1	US-08-673-789-10	Sequence 10, Appli	526	28	58.3	3472	2	US-09-408-020-4	Sequence 4, Appli
454	28	58.3	860	2	US-09-936-989A-2	Sequence 2, Appli	527	28	58.3	6239	2	US-09-914-286-4	Sequence 4, Appli
455	28	58.3	866	2	US-09-556-877-189	Sequence 189, App	528	27	56.2	5	2	US-08-075-541D-14	Sequence 14, Appli
456	28	58.3	866	2	US-09-620-412C-189	Sequence 189, App	529	27	56.2	18	2	US-08-075-541D-32	Sequence 32, Appli
457	28	58.3	866	2	US-09-598-419-189	Sequence 189, App	530	27	56.2	32	2	US-08-075-541D-7	Sequence 7, Appli
458	28	58.3	873	1	US-08-912-129A-61	Sequence 61, Appli	531	27	56.2	32	2	US-08-075-541D-8	Sequence 8, Appli
459	28	58.3	873	2	US-08-911-824-61	Sequence 61, Appli	532	27	56.2	32	2	US-10-107-695B-4	Sequence 4, Appli
460	28	58.3	880	2	US-09-556-877-175	Sequence 175, App	533	27	56.2	32	2	US-10-098-108-4	Sequence 4, Appli
461	28	58.3	880	2	US-09-620-412C-175	Sequence 175, App	534	27	56.2	36	2	US-09-716-129-153	Sequence 153, App
462	28	58.3	880	2	US-09-598-419-175	Sequence 175, App	535	27	56.2	37	1	US-08-942-423-6	Sequence 6, Appli
463	28	58.3	891	2	US-09-252-991A-11941	Sequence 11941, A	536	27	56.2	68	2	US-09-270-767-55749	Sequence 55749, A
464	28	58.3	925	2	US-09-936-989A-6	Sequence 6, Appli	537	27	56.2	68	2	US-09-270-767-55749	Sequence 55749, A
465	28	58.3	945	2	US-09-949-016-8172	Sequence 8172, Ap	538	27	56.2	77	2	US-09-540-236-3068	Sequence 3068, Ap

539	27	56.2	78	2	US-09-540-236-2697	Sequence 2697, Ap	612	27	56.2	273	2	US-08-455-829-10	Sequence 10, Appl
540	27	56.2	79	2	US-09-513-999C-7701	Sequence 7701, Ap	613	27	56.2	273	2	US-08-235-896C-13	Sequence 13, Appl
541	27	56.2	81	1	US-08-469-412A-16	Sequence 16, Appl	614	27	56.2	273	2	US-08-455-893C-13	Sequence 10, Appl
542	27	56.2	81	2	US-09-021-715-16	Sequence 16, Appl	615	27	56.2	273	2	US-09-248-766A-15062	Sequence 15062, A
543	27	56.2	82	2	US-09-583-110-4108	Sequence 4108, Ap	616	27	56.2	274	2	US-09-188-930-336	Sequence 336, Ap
544	27	56.2	82	2	US-09-107-433-3886	Sequence 3886, Ap	617	27	56.2	274	2	US-09-312-283C-336	Sequence 336, Ap
545	27	56.2	85	1	US-08-162-081B-46	Sequence 46, Appl	618	27	56.2	284	2	US-09-543-681A-6058	Sequence 6058, Ap
546	27	56.2	85	1	US-08-780-872-46	Sequence 46, Appl	619	27	56.2	284	2	US-09-489-039A-10967	Sequence 10967, A
547	27	56.2	85	1	US-09-085-957-46	Sequence 46, Appl	620	27	56.2	285	2	US-08-311-771A-34	Sequence 34, Appl
548	27	56.2	86	2	US-09-270-767-61896	Sequence 46, Appl	621	27	56.2	285	2	US-08-311-771A-36	Sequence 36, Appl
549	27	56.2	86	2	US-09-248-796A-26577	Sequence 61896, A	622	27	56.2	287	2	US-09-270-767-45898	Sequence 45898, A
550	27	56.2	98	2	US-09-621-976-6255	Sequence 6255, Ap	623	27	56.2	289	2	US-09-361-096A-47	Sequence 47, Appl
551	27	56.2	98	2	US-09-513-999C-5765	Sequence 5765, Ap	624	27	56.2	290	2	US-09-252-991A-29035	Sequence 29035, A
552	27	56.2	103	2	US-09-134-001C-3738	Sequence 3738, Ap	625	27	56.2	291	2	US-09-602-777A-36	Sequence 36, Appl
553	27	56.2	106	2	US-09-113-977C-42	Sequence 42, Appl	626	27	56.2	292	2	US-09-328-352-4894	Sequence 4894, Ap
554	27	56.2	106	2	US-09-113-977C-43	Sequence 43, Appl	627	27	56.2	292	2	US-09-543-681A-5957	Sequence 5957, Ap
555	27	56.2	106	2	US-09-351-048A-42	Sequence 42, Appl	628	27	56.2	293	2	US-09-248-766A-14234	Sequence 14234, A
556	27	56.2	106	2	US-09-351-048A-43	Sequence 43, Appl	629	27	56.2	294	2	US-09-902-540-12165	Sequence 12165, A
557	27	56.2	106	2	US-10-193-653-42	Sequence 42, Appl	630	27	56.2	300	2	US-09-134-001C-4097	Sequence 4097, Ap
558	27	56.2	106	2	US-10-193-653-43	Sequence 43, Appl	631	27	56.2	300	2	US-09-248-796A-20770	Sequence 20770, A
559	27	56.2	107	2	US-09-113-977C-41	Sequence 41, Appl	632	27	56.2	300	2	US-09-902-540-11871	Sequence 11871, A
560	27	56.2	107	2	US-09-351-048A-41	Sequence 41, Appl	633	27	56.2	306	1	US-08-089-968-2	Sequence 2, Appl
561	27	56.2	107	2	US-10-193-653-41	Sequence 41, Appl	634	27	56.2	306	1	US-08-478-585-2	Sequence 2, Appl
562	27	56.2	111	2	US-09-270-767-35636	Sequence 35636, A	635	27	56.2	306	1	US-08-717-312-2	Sequence 2, Appl
563	27	56.2	111	2	US-09-270-767-35083	Sequence 50833, A	636	27	56.2	306	1	US-08-266-408-2	Sequence 2, Appl
564	27	56.2	114	2	US-09-107-532A-5130	Sequence 5130, Ap	637	27	56.2	306	4	PCT-US94-07886-2	Sequence 2, Appl
565	27	56.2	121	2	US-09-248-796A-16713	Sequence 16713, A	638	27	56.2	311	2	US-09-179-558-66	Sequence 66, Appl
566	27	56.2	125	2	US-09-107-532A-4929	Sequence 4929, Ap	639	27	56.2	311	2	US-09-722-828-66	Sequence 66, Appl
567	27	56.2	126	2	US-09-270-767-61515	Sequence 61515, A	640	27	56.2	311	2	US-09-722-487-66	Sequence 66, Appl
568	27	56.2	130	2	US-09-328-352-6607	Sequence 6607, Ap	641	27	56.2	319	2	US-09-722-708-66	Sequence 66, Appl
569	27	56.2	131	2	US-09-902-540-15267	Sequence 15267, A	642	27	56.2	320	2	US-09-543-681A-4976	Sequence 4976, Ap
570	27	56.2	132	2	US-09-248-796A-19032	Sequence 19032, A	643	27	56.2	320	2	US-09-328-352-4419	Sequence 4419, Ap
571	27	56.2	141	2	US-09-270-767-32085	Sequence 32085, A	644	27	56.2	322	1	US-08-036-210-11	Sequence 11, Appl
572	27	56.2	159	2	US-09-270-767-47530	Sequence 47530, A	645	27	56.2	322	1	US-08-449-609-11	Sequence 11, Appl
573	27	56.2	160	2	US-09-270-767-32187	Sequence 32187, A	646	27	56.2	322	1	US-09-361-096A-11	Sequence 11, Appl
574	27	56.2	160	2	US-09-270-767-47404	Sequence 47404, A	647	27	56.2	322	2	US-09-270-767-46326	Sequence 46326, A
575	27	56.2	161	2	US-08-990-791-13	Sequence 13, Appl	648	27	56.2	324	2	US-09-361-096A-11	Sequence 11, Appl
576	27	56.2	161	2	US-09-372-591-13	Sequence 13, Appl	649	27	56.2	325	2	US-09-711-164-358	Sequence 358, Ap
577	27	56.2	161	2	US-09-372-591-13	Sequence 13, Appl	650	27	56.2	332	2	US-09-605-703B-2694	Sequence 2694, Ap
578	27	56.2	171	1	US-08-609-049A-21	Sequence 21, Appl	651	27	56.2	332	2	US-09-540-236-2281	Sequence 2281, Ap
579	27	56.2	171	1	US-09-107-996A-21	Sequence 21, Appl	652	27	56.2	338	2	US-09-270-767-38469	Sequence 38469, A
580	27	56.2	174	2	US-08-426-630-45	Sequence 45, Appl	653	27	56.2	338	2	US-09-270-767-53686	Sequence 53686, A
581	27	56.2	176	1	US-08-036-210-9	Sequence 9, Appl	654	27	56.2	342	2	US-09-270-767-45977	Sequence 45977, A
582	27	56.2	176	1	US-08-449-609-9	Sequence 9, Appl	655	27	56.2	342	2	US-09-902-540-13662	Sequence 13662, A
583	27	56.2	176	2	US-09-361-096A-9	Sequence 9, Appl	656	27	56.2	344	2	US-09-543-681A-7493	Sequence 7493, Ap
584	27	56.2	179	2	US-09-270-767-32208	Sequence 32208, A	657	27	56.2	347	2	US-09-543-681A-7493	Sequence 7493, Ap
585	27	56.2	182	2	US-09-270-767-47425	Sequence 47425, A	658	27	56.2	352	2	US-09-108-020-14	Sequence 14, Appl
586	27	56.2	182	2	US-09-134-000C-4700	Sequence 4700, Ap	659	27	56.2	352	2	US-09-108-020-51	Sequence 51, Appl
587	27	56.2	182	2	US-09-252-991A-27281	Sequence 27281, A	660	27	56.2	352	2	US-09-685-296-14	Sequence 14, Appl
588	27	56.2	188	2	US-09-270-767-38256	Sequence 38256, A	661	27	56.2	352	2	US-09-685-296-51	Sequence 51, Appl
589	27	56.2	188	2	US-09-270-767-53473	Sequence 53473, A	662	27	56.2	359	2	US-09-179-538-65	Sequence 65, Appl
590	27	56.2	191	2	US-09-270-767-42015	Sequence 42015, A	663	27	56.2	359	2	US-09-722-825-65	Sequence 65, Appl
591	27	56.2	192	2	US-09-902-540-12517	Sequence 12517, A	664	27	56.2	359	2	US-09-722-487-65	Sequence 65, Appl
592	27	56.2	207	2	US-09-902-540-12087	Sequence 12087, A	665	27	56.2	359	2	US-09-198-452A-131	Sequence 131, Appl
593	27	56.2	207	2	US-09-149-476-516	Sequence 516, Ap	666	27	56.2	359	2	US-09-722-708-65	Sequence 65, Appl
594	27	56.2	209	2	US-09-270-767-42693	Sequence 42693, A	667	27	56.2	359	2	US-09-438-188A-115	Sequence 115, Appl
595	27	56.2	213	2	US-09-134-001C-3969	Sequence 3969, Ap	668	27	56.2	363	2	US-09-352-991A-27806	Sequence 27806, A
596	27	56.2	216	2	US-08-543-246B-9	Sequence 9, Appl	669	27	56.2	369	2	US-09-328-352-5905	Sequence 5905, Ap
597	27	56.2	219	2	US-08-543-246B-24	Sequence 24, Appl	670	27	56.2	375	2	US-09-489-039A-7667	Sequence 7667, Ap
598	27	56.2	223	2	US-09-270-767-45934	Sequence 45934, A	671	27	56.2	375	2	US-09-248-796A-19504	Sequence 19504, A
599	27	56.2	223	2	US-09-949-002-508	Sequence 508, Ap	672	27	56.2	376	2	US-09-370-838-188	Sequence 188, Ap
600	27	56.2	228	2	US-09-252-991A-24998	Sequence 24998, A	673	27	56.2	376	2	US-09-854-133-188	Sequence 188, Ap
601	27	56.2	232	2	US-09-149-476-633	Sequence 633, Ap	674	27	56.2	378	2	US-09-134-000C-6610	Sequence 6610, Ap
602	27	56.2	236	2	US-09-134-001C-4085	Sequence 4085, Ap	675	27	56.2	385	2	US-09-489-039A-7667	Sequence 7667, Ap
603	27	56.2	240	2	US-09-489-039A-7742	Sequence 7742, Ap	676	27	56.2	385	2	US-09-107-433-4643	Sequence 4643, Ap
604	27	56.2	240	2	US-09-489-039A-7742	Sequence 7742, Ap	677	27	56.2	389	2	US-09-248-796A-15930	Sequence 15930, A
605	27	56.2	246	2	US-09-328-352-6152	Sequence 6152, Ap	678	27	56.2	390	2	US-08-650-766-7	Sequence 7, Appl
606	27	56.2	252	2	US-09-149-476-332	Sequence 332, Ap	679	27	56.2	390	2	US-08-922-635-6	Sequence 6, Appl
607	27	56.2	254	2	US-09-540-236-2232	Sequence 2232, Ap	680	27	56.2	390	2	US-09-389-487-7	Sequence 7, Appl
608	27	56.2	264	2	US-09-489-039A-7334	Sequence 7334, Ap	681	27	56.2	393	2	US-09-414-643-6	Sequence 6, Appl
609	27	56.2	265	2	US-09-949-016-9336	Sequence 9336, Ap	682	27	56.2	393	2	US-09-270-767-42217	Sequence 42217, A
610	27	56.2	268	2	US-09-523-263B-13	Sequence 13, Appl	683	27	56.2	395	2	US-09-917-254-56	Sequence 56, Appl
611	27	56.2	273	1	US-08-320-161-10	Sequence 10, Appl	684	27	56.2	396	2	US-09-902-540-15124	Sequence 15124, A

685	27	56.2	401	2	US-09-361-096A-15	Sequence 15, Appl	758	27	56.2	577	2	US-09-902-540-15872	Sequence 15872, A
686	27	56.2	402	1	US-08-036-210-15	Sequence 15, Appl	759	27	56.2	582	2	US-09-252-991A-20481	Sequence 20481, A
687	27	56.2	402	1	US-08-449-609-15	Sequence 15, Appl	760	27	56.2	583	2	US-09-949-016-8267	Sequence 8267, Ap
688	27	56.2	410	2	US-09-328-352-6146	Sequence 6146, Ap	761	27	56.2	585	2	US-09-489-039A-12909	Sequence 12909, A
689	27	56.2	418	2	US-09-248-796A-18441	Sequence 18441, A	762	27	56.2	589	2	US-09-643-657-7-14	Sequence 6, Appl
690	27	56.2	420	2	US-09-107-532A-4006	Sequence 4006, Ap	763	27	56.2	592	1	US-08-736-770-6	Sequence 6, Appl
691	27	56.2	421	2	US-09-002-567B-1	Sequence 1, Appl	764	27	56.2	592	2	US-09-702-705-1809	Sequence 1809, Ap
692	27	56.2	421	2	US-09-002-567B-3	Sequence 3, Appl	765	27	56.2	592	2	US-09-736-457-1809	Sequence 1809, Ap
693	27	56.2	421	2	US-09-571-347-1	Sequence 1, Appl	766	27	56.2	592	2	US-09-643-657-4	Sequence 4, Appl
694	27	56.2	421	2	US-09-571-347-3	Sequence 3, Appl	767	27	56.2	592	2	US-09-671-325-1809	Sequence 1809, Ap
695	27	56.2	421	2	US-09-248-796A-22036	Sequence 22036, A	768	27	56.2	592	2	US-10-017-754-1809	Sequence 1809, Ap
696	27	56.2	421	2	US-09-949-016-6892	Sequence 6892, Ap	769	27	56.2	595	2	US-09-248-796A-14562	Sequence 14562, A
697	27	56.2	424	1	US-08-247-908A-11	Sequence 11, Appl	770	27	56.2	596	2	US-09-949-016-7776	Sequence 7776, Ap
698	27	56.2	424	1	US-08-453-942-11	Sequence 11, Appl	771	27	56.2	601	1	US-08-333-358-1-14	Sequence 14, Appl
699	27	56.2	424	1	US-08-926-885A-11	Sequence 11, Appl	772	27	56.2	601	1	US-08-463-694-14	Sequence 14, Appl
700	27	56.2	424	4	PCT-US94-05290-11	Sequence 11, Appl	773	27	56.2	601	1	US-08-694-501-14	Sequence 14, Appl
701	27	56.2	426	2	US-09-270-767-35910	Sequence 35910, A	774	27	56.2	605	2	US-09-949-016-8823	Sequence 8823, Ap
702	27	56.2	426	2	US-09-270-767-51127	Sequence 51127, A	775	27	56.2	617	1	US-08-137-614A-24	Sequence 24, Appl
703	27	56.2	427	2	US-09-550-645-2	Sequence 2, Appl	776	27	56.2	621	2	US-09-489-039A-9256	Sequence 9256, Ap
704	27	56.2	428	2	US-09-922-364A-32	Sequence 32, Appl	777	27	56.2	621	2	US-09-248-796A-15807	Sequence 15807, A
705	27	56.2	428	2	US-09-254-590-32	Sequence 32, Appl	778	27	56.2	651	2	US-08-650-765-6	Sequence 6, Appl
706	27	56.2	428	2	US-10-115-415-32	Sequence 32, Appl	779	27	56.2	651	2	US-08-922-635-5	Sequence 5, Appl
707	27	56.2	428	2	US-10-116-260-32	Sequence 32, Appl	780	27	56.2	651	2	US-09-389-487-6	Sequence 6, Appl
708	27	56.2	428	2	US-10-115-671-32	Sequence 32, Appl	781	27	56.2	651	2	US-09-414-643-5	Sequence 5, Appl
709	27	56.2	428	2	US-10-115-695-32	Sequence 32, Appl	782	27	56.2	675	2	US-09-252-991A-27026	Sequence 27026, A
710	27	56.2	439	2	US-09-409-096-6	Sequence 6, Appl	783	27	56.2	676	2	US-09-248-796A-14898	Sequence 14898, A
711	27	56.2	439	2	US-09-248-796A-18964	Sequence 18964, A	784	27	56.2	688	1	US-08-221-817-19	Sequence 19, Appl
712	27	56.2	441	4	PCT-US93-12588-98	Sequence 98, Appl	785	27	56.2	688	1	US-08-454-439-19	Sequence 19, Appl
713	27	56.2	441	1	PCT-US95-08071-98	Sequence 98, Appl	786	27	56.2	688	4	PCT-US94-10487-19	Sequence 19, Appl
714	27	56.2	443	1	US-08-833-963C-2	Sequence 2, Appl	787	27	56.2	698	2	US-09-949-016-10644	Sequence 10644, A
715	27	56.2	443	2	US-08-980-514-1	Sequence 1, Appl	788	27	56.2	714	2	US-09-248-796A-18997	Sequence 18997, A
716	27	56.2	449	2	US-09-248-796A-14389	Sequence 14389, A	789	27	56.2	727	2	US-09-179-558-56	Sequence 56, Appl
717	27	56.2	452	2	US-09-252-991A-20884	Sequence 20884, A	790	27	56.2	727	2	US-09-722-825-56	Sequence 56, Appl
718	27	56.2	458	3	US-09-041-075A-11	Sequence 11, Appl	791	27	56.2	727	2	US-09-722-825-56	Sequence 56, Appl
719	27	56.2	460	2	US-09-248-796A-17144	Sequence 17144, A	792	27	56.2	742	2	US-09-107-532A-4996	Sequence 4996, Ap
720	27	56.2	463	2	US-09-270-767-45547	Sequence 45547, A	793	27	56.2	752	2	US-09-585-858-56	Sequence 26, Appl
721	27	56.2	463	2	US-09-949-016-10459	Sequence 10459, A	794	27	56.2	752	2	US-09-917-854-70	Sequence 26, Appl
722	27	56.2	465	2	US-09-328-352-4555	Sequence 4555, Ap	795	27	56.2	752	2	US-10-270-8278-56	Sequence 26, Appl
723	27	56.2	466	2	US-09-949-016-7792	Sequence 7792, Ap	796	27	56.2	752	2	US-09-543-681A-4312	Sequence 4312, Ap
724	27	56.2	472	2	US-09-352-991A-23070	Sequence 23070, A	797	27	56.2	803	2	US-08-533-306A-6	Sequence 6, Appl
725	27	56.2	475	2	US-09-583-110-3986	Sequence 3986, Ap	798	27	56.2	816	1	US-08-742-923A-6	Sequence 6, Appl
726	27	56.2	481	2	US-10-104-047-2394	Sequence 2394, Ap	799	27	56.2	829	1	US-09-543-681A-6067	Sequence 6067, Ap
727	27	56.2	484	2	US-09-605-703B-2414	Sequence 2414, Ap	800	27	56.2	879	2	US-08-533-306A-4	Sequence 4, Appl
728	27	56.2	486	1	US-08-942-423-2	Sequence 2, Appl	801	27	56.2	885	1	US-08-742-923A-4	Sequence 4, Appl
729	27	56.2	486	2	US-08-904-452-2	Sequence 2, Appl	802	27	56.2	885	1	US-09-252-991A-32194	Sequence 32194, A
730	27	56.2	486	2	US-08-630-915A-26	Sequence 26, Appl	803	27	56.2	892	2	US-08-036-210-22	Sequence 22, Appl
731	27	56.2	486	2	US-09-517-639-2	Sequence 26, Appl	804	27	56.2	898	1	US-08-449-609-22	Sequence 22, Appl
732	27	56.2	488	2	US-09-879-957-26	Sequence 26, Appl	805	27	56.2	898	2	US-09-361-096A-22	Sequence 11, Appl
733	27	56.2	488	2	US-09-540-236-3027	Sequence 46087, A	806	27	56.2	906	2	US-08-474-067-6	Sequence 6, Appl
734	27	56.2	493	2	US-09-270-767-46087	Sequence 28162, A	807	27	56.2	913	1	US-08-474-068A-6	Sequence 6, Appl
735	27	56.2	494	2	US-09-252-991A-28162	Sequence 43061, A	808	27	56.2	913	1	US-08-683-262B-75	Sequence 75, Appl
736	27	56.2	500	2	US-09-270-767-43061	Sequence 25507, A	809	27	56.2	913	1	US-08-904-452-4	Sequence 4, Appl
737	27	56.2	500	2	US-09-248-796A-25507	Sequence 25507, A	810	27	56.2	913	1	US-08-179-558-55	Sequence 55, Appl
738	27	56.2	510	2	US-09-949-016-10021	Sequence 10021, A	811	27	56.2	941	2	US-09-361-707-75	Sequence 75, Appl
739	27	56.2	514	2	US-09-248-796A-25666	Sequence 25666, A	812	27	56.2	941	2	US-09-722-825-55	Sequence 55, Appl
740	27	56.2	516	2	US-10-104-047-3813	Sequence 3813, Ap	813	27	56.2	941	2	US-09-722-825-55	Sequence 55, Appl
741	27	56.2	523	2	US-09-252-991A-31596	Sequence 31596, A	814	27	56.2	941	2	US-09-722-825-55	Sequence 55, Appl
742	27	56.2	537	2	US-09-489-039A-10024	Sequence 10024, A	815	27	56.2	973	1	US-08-683-262B-75	Sequence 75, Appl
743	27	56.2	546	2	US-09-252-991A-23291	Sequence 23291, A	816	27	56.2	973	1	US-08-904-452-4	Sequence 4, Appl
744	27	56.2	553	2	US-09-489-039A-10290	Sequence 10290, A	817	27	56.2	973	2	US-09-361-707-75	Sequence 75, Appl
745	27	56.2	555	1	US-08-453-702A-98	Sequence 98, Appl	818	27	56.2	998	2	US-09-517-639-4	Sequence 4, Appl
746	27	56.2	555	2	US-09-830-807-45	Sequence 98, Appl	819	27	56.2	998	2	US-09-949-016-8326	Sequence 8326, Ap
747	27	56.2	556	1	US-07-998-003A-98	Sequence 98, Appl	820	27	56.2	1068	2	US-08-390-874C-11	Sequence 11, Appl
748	27	56.2	556	1	US-08-453-274B-98	Sequence 98, Appl	821	27	56.2	1068	2	US-09-266-772-11	Sequence 11, Appl
749	27	56.2	556	1	US-08-453-695A-98	Sequence 98, Appl	822	27	56.2	1068	2	US-09-538-092-1111	Sequence 1111, Ap
750	27	56.2	556	1	US-08-668-161A-98	Sequence 98, Appl	823	27	56.2	1069	1	US-08-162-081B-37	Sequence 37, Appl
751	27	56.2	556	2	US-09-099-639-98	Sequence 98, Appl	824	27	56.2	1069	1	US-08-780-872-37	Sequence 37, Appl
752	27	56.2	563	2	US-10-197-220-106	Sequence 106, Appl	825	27	56.2	1070	2	US-09-085-957-37	Sequence 37, Appl
753	27	56.2	567	2	US-09-711-164-409	Sequence 409, App	826	27	56.2	1070	2	US-08-922-635-22	Sequence 22, Appl
754	27	56.2	574	2	US-09-949-016-6379	Sequence 6379, Ap	827	27	56.2	1070	2	US-09-414-643-22	Sequence 22, Appl
755	27	56.2	574	2	US-10-225-323A-19	Sequence 19, Appl	828	27	56.2	1072	2	US-09-949-016-6973	Sequence 6973, Ap
756	27	56.2	576	1	US-08-533-306A-2	Sequence 2, Appl	829	27	56.2	1078	2	US-08-480-474-11	Sequence 11, Appl
757	27	56.2	576	1	US-08-742-923A-2	Sequence 2, Appl	830	27	56.2	1080	1	US-08-162-081B-36	Sequence 36, Appl

831	27	56.2	1080	1	US-08-780-872-36	Sequence 36, Appl	904	26	54.2	10	1	US-08-902-516-19	Sequence 19, Appl
832	27	56.2	1080	2	US-09-085-957-36	Sequence 36, Appl	905	26	54.2	10	2	US-08-704-344-22	Sequence 22, Appl
833	27	56.2	1085	2	US-09-949-016-8762	Sequence 8762, Ap	906	26	54.2	10	2	US-09-847-185-19	Sequence 19, Appl
834	27	56.2	1085	2	US-09-949-016-8763	Sequence 8763, Ap	907	26	54.2	10	2	US-09-601-779-270	Sequence 270, App
835	27	56.2	1085	2	US-09-949-016-8764	Sequence 8764, Ap	908	26	54.2	10	2	US-09-980-177A-19	Sequence 19, Appl
836	27	56.2	1085	2	US-09-949-016-8765	Sequence 8765, Ap	909	26	54.2	16	2	US-09-009-953-29	Sequence 29, Appl
837	27	56.2	1106	2	US-09-949-016-8766	Sequence 6972, Ap	910	26	54.2	16	2	US-09-009-953-28	Sequence 38, Appl
838	27	56.2	1114	2	US-09-949-016-5925	Sequence 5925, Ap	911	26	54.2	26	2	US-09-962-505-425	Sequence 425, App
839	27	56.2	1114	2	US-09-949-016-6972	Sequence 6975, Ap	912	26	54.2	34	2	US-09-270-767-44550	Sequence 44550, A
840	27	56.2	1127	2	US-09-949-016-7671	Sequence 7671, Ap	913	26	54.2	57	2	US-09-270-767-35061	Sequence 35061, A
841	27	56.2	1127	2	US-09-949-016-7672	Sequence 7672, Ap	914	26	54.2	57	2	US-09-270-767-50278	Sequence 50278, A
842	27	56.2	1127	2	US-09-949-016-7673	Sequence 7673, Ap	915	26	54.2	59	2	US-09-390-027-6	Sequence 21500, A
843	27	56.2	1127	2	US-09-949-016-7674	Sequence 7674, Ap	916	26	54.2	61	2	US-09-248-796A-21500	Sequence 4690, Ap
844	27	56.2	1127	2	US-09-949-016-8766	Sequence 8766, Ap	917	26	54.2	62	2	US-09-583-110-4690	Sequence 6219, Ap
845	27	56.2	1127	2	US-09-949-016-8767	Sequence 8767, Ap	918	26	54.2	64	2	US-09-511-999C-6219	Sequence 6219, Ap
846	27	56.2	1127	2	US-09-949-016-8768	Sequence 8768, Ap	919	26	54.2	66	1	US-08-588-258B-9	Sequence 9, Appl
847	27	56.2	1127	2	US-09-949-016-8769	Sequence 8769, Ap	920	26	54.2	66	1	US-08-588-258B-14	Sequence 14, Appl
848	27	56.2	1141	1	US-08-363-300-2	Sequence 2, Appl	921	26	54.2	66	2	US-08-460-505-9	Sequence 9, Appl
849	27	56.2	1161	1	US-09-716-964B-118	Sequence 118, App	922	26	54.2	66	2	US-08-460-505-14	Sequence 14, Appl
850	27	56.2	1168	2	US-09-762-311-5	Sequence 5, Appl	923	26	54.2	66	4	PCT-US96-08285-9	Sequence 14, Appl
851	27	56.2	1207	2	US-09-817-762-7	Sequence 7, Appl	924	26	54.2	66	4	PCT-US96-08285-9	Sequence 14, Appl
852	27	56.2	1216	2	US-09-583-110-3824	Sequence 3824, Ap	925	26	54.2	68	4	US-09-543-681A-7973	Sequence 7973, Ap
853	27	56.2	1216	2	US-09-769-787-12	Sequence 12, Appl	926	26	54.2	68	2	US-09-248-796A-25349	Sequence 25349, A
854	27	56.2	1224	2	US-09-107-433-4347	Sequence 4347, Ap	927	26	54.2	71	2	US-09-248-796A-21247	Sequence 21247, A
855	27	56.2	1224	2	US-09-489-039A-7178	Sequence 7178, Ap	928	26	54.2	72	2	US-09-248-796A-21247	Sequence 21247, A
856	27	56.2	1421	1	US-08-231-193A-11	Sequence 11, Appl	929	26	54.2	75	2	US-09-270-767-41391	Sequence 41391, A
857	27	56.2	1464	1	US-08-486-273A-11	Sequence 11, Appl	930	26	54.2	90	1	US-08-589-080-1	Sequence 56607, A
858	27	56.2	1464	2	US-08-940-086A-11	Sequence 11, Appl	931	26	54.2	90	1	US-08-589-080-1	Sequence 1, Appl
859	27	56.2	1464	2	US-08-436-332B-10	Sequence 10, Appl	932	26	54.2	91	2	US-09-489-039A-14306	Sequence 14306, A
860	27	56.2	1464	2	US-08-940-035A-11	Sequence 11, Appl	933	26	54.2	92	2	US-09-248-796A-22508	Sequence 22508, A
861	27	56.2	1464	2	US-08-935-105A-11	Sequence 11, Appl	934	26	54.2	94	2	US-09-149-476-505	Sequence 505, App
862	27	56.2	1464	2	US-09-648-797-11	Sequence 11, Appl	935	26	54.2	94	2	US-09-107-532A-6772	Sequence 6772, Ap
863	27	56.2	1464	2	US-08-217-704C-2	Sequence 2, Appl	936	26	54.2	96	2	US-09-673-335A-482	Sequence 482, App
864	27	56.2	1464	2	US-09-386-123-11	Sequence 11, Appl	937	26	54.2	101	2	US-09-513-999C-5294	Sequence 45731, A
865	27	56.2	1464	2	US-09-949-016-8311	Sequence 8311, Ap	938	26	54.2	101	2	US-09-270-767-45731	Sequence 58781, A
866	27	56.2	1464	2	US-10-038-937-11	Sequence 11, Appl	939	26	54.2	102	2	US-09-270-767-58781	Sequence 58781, A
867	27	56.2	1464	2	US-10-007-747-11	Sequence 11, Appl	940	26	54.2	102	2	US-09-583-110-3604	Sequence 3604, Ap
868	27	56.2	1464	2	US-09-945-901-11	Sequence 2, Appl	941	26	54.2	102	2	US-09-270-767-33040	Sequence 33040, A
869	27	56.2	1504	2	US-09-364-206-2	Sequence 2863, A	942	26	54.2	102	2	US-09-270-767-4857	Sequence 4857, A
870	27	56.2	1627	2	US-09-252-991A-28863	Sequence 91, Appl	943	26	54.2	105	2	US-09-248-796A-18434	Sequence 18434, A
871	27	56.2	1857	2	US-09-917-254-91	Sequence 2, Appl	944	26	54.2	106	2	US-09-107-433-4126	Sequence 4126, Ap
872	27	56.2	1912	2	US-08-913-832A-2	Sequence 2, Appl	945	26	54.2	107	2	US-09-328-352-5811	Sequence 5811, Ap
873	27	56.2	1912	2	US-09-249-181A-2	Sequence 2, Appl	946	26	54.2	112	2	US-08-728-742A-56	Sequence 56, Appl
874	27	56.2	1912	2	US-09-158-707-2	Sequence 3, Appl	947	26	54.2	112	2	US-09-513-999C-8132	Sequence 8132, Ap
875	27	56.2	1972	2	US-08-875-435B-3	Sequence 4, Appl	948	26	54.2	116	2	US-08-311-731A-302	Sequence 302, App
876	27	56.2	1972	2	US-08-875-435B-4	Sequence 1084, Ap	949	26	54.2	128	1	US-08-946-528-9	Sequence 9, Appl
877	27	56.2	1972	2	US-09-538-092-1084	Sequence 7111, Ap	950	26	54.2	128	2	US-09-270-767-31929	Sequence 31929, A
878	27	56.2	1984	2	US-09-949-016-7111	Sequence 7113, Ap	951	26	54.2	128	2	US-09-270-767-47146	Sequence 47146, A
879	27	56.2	1984	2	US-09-949-016-7112	Sequence 7113, Ap	952	26	54.2	128	2	US-09-270-767-47146	Sequence 1338, Ap
880	27	56.2	1984	2	US-09-949-016-7113	Sequence 8849, Ap	953	26	54.2	128	2	US-09-107-433-3731	Sequence 6900, Ap
881	27	56.2	2262	2	US-09-949-016-8849	Sequence 2, Appl	954	26	54.2	129	2	US-09-328-352-6900	Sequence 15956, A
882	27	56.2	2262	2	US-09-822-871-2	Sequence 4, Appl	955	26	54.2	130	2	US-09-270-767-43791	Sequence 43791, A
883	27	56.2	2301	2	US-09-822-871-4	Sequence 4, Appl	956	26	54.2	134	2	US-09-134-001C-4127	Sequence 4127, Ap
884	27	56.2	2301	2	US-07-960-112B-2	Sequence 2, Appl	957	26	54.2	135	2	US-09-802-540-10119	Sequence 10119, A
885	27	56.2	2301	2	US-08-301-116B-2	Sequence 2, Appl	958	26	54.2	136	2	US-08-857-076-13	Sequence 13, Appl
886	27	56.2	2301	2	US-08-473-399B-2	Sequence 2, Appl	959	26	54.2	139	2	US-09-205-658-13	Sequence 13, Appl
887	27	56.2	2301	2	US-08-853-831-2	Sequence 2, Appl	960	26	54.2	141	1	US-08-470-179-17	Sequence 17, Appl
888	27	56.2	2301	2	US-09-510-885-2	Sequence 2, Appl	961	26	54.2	141	1	US-08-470-179-18	Sequence 18, Appl
889	27	56.2	2301	2	PCT-US93-09774-2	Sequence 4, Appl	962	26	54.2	141	1	US-08-470-179-19	Sequence 19, Appl
890	27	56.2	2301	2	PCT-US93-09774-2	Sequence 4, Appl	963	26	54.2	141	1	US-08-470-179-20	Sequence 20, Appl
891	27	56.2	2301	2	US-07-960-112B-4	Sequence 4, Appl	964	26	54.2	141	1	US-09-248-796A-17799	Sequence 17799, A
892	27	56.2	2301	2	US-08-301-316B-4	Sequence 4, Appl	965	26	54.2	142	2	US-09-270-767-42248	Sequence 42248, A
893	27	56.2	2301	2	US-08-473-399B-4	Sequence 4, Appl	966	26	54.2	149	2	US-09-270-767-60840	Sequence 60840, A
894	27	56.2	2301	2	US-08-853-831-4	Sequence 4, Appl	967	26	54.2	151	2	US-09-270-767-36522	Sequence 36522, A
895	27	56.2	2301	2	US-09-510-885-4	Sequence 4, Appl	968	26	54.2	158	2	US-09-270-767-51739	Sequence 51739, A
896	27	56.2	2301	2	PCT-US93-09774-4	Sequence 4, Appl	969	26	54.2	158	2	US-09-270-767-51739	Sequence 17, Appl
897	27	56.2	2301	2	US-08-787-547-104	Sequence 104, App	970	26	54.2	161	2	US-08-493-071-17	Sequence 17, Appl
898	27	56.2	2301	2	US-08-948-378A-17	Sequence 17, Appl	971	26	54.2	161	2	US-09-543-681A-5528	Sequence 5258, Ap
899	27	56.2	2301	2	US-09-169-425C-17	Sequence 16, Appl	972	26	54.2	161	2	US-09-270-767-45329	Sequence 45329, A
900	27	56.2	2301	2	US-08-197-484-66	Sequence 17, Appl	973	26	54.2	161	2	US-09-270-767-48578	Sequence 48578, A
901	27	56.2	2301	2	US-09-759-960-17	Sequence 11, Appl	974	26	54.2	162	2	US-09-270-767-49086	Sequence 49086, A
902	27	56.2	2301	2	US-10-365-908-3	Sequence 3, Appl	975	26	54.2	163	2	US-09-053-197A-22	Sequence 22, Appl
903	27	56.2	2301	2	PCT-US95-02121-66	Sequence 66, Appl	976	26	54.2	163	2	US-09-053-197A-22	Sequence 22, Appl

977 26 54.2 163 2 US-09-085-761A-22 Sequence 22, Appl
978 26 54.2 171 2 US-09-248-796A-15897 Sequence 15897, A
979 26 54.2 172 2 US-09-107-532A-4222 Sequence 4222, Ap
980 26 54.2 177 2 US-09-248-796A-14725 Sequence 14725, A
981 26 54.2 178 2 US-09-267-963D-33 Sequence 33, Appl
982 26 54.2 181 1 US-08-392-625-22 Sequence 22, Appl
983 26 54.2 181 1 US-08-466-961A-22 Sequence 22, Appl
984 26 54.2 181 1 US-08-645-193B-24 Sequence 24, Appl
985 26 54.2 186 2 US-09-430-221-1 Sequence 1, Appl
986 26 54.2 187 2 US-08-493-071-16 Sequence 16, Appl
987 26 54.2 187 2 US-08-493-071-16 Sequence 16, Appl
988 26 54.2 187 2 US-09-252-991A-26696 Sequence 26696, A
989 26 54.2 190 2 US-09-583-110-2730 Sequence 2730, Ap
990 26 54.2 191 2 US-09-248-796A-22261 Sequence 22261, A
991 26 54.2 193 1 US-08-987-122-2 Sequence 2, Appl
992 26 54.2 193 2 US-09-134-001C-4171 Sequence 4171, Ap
993 26 54.2 193 2 US-09-583-110-3434 Sequence 3434, Ap
994 26 54.2 193 2 US-09-107-433-4419 Sequence 4419, Ap
995 26 54.2 193 3 US-09-198-284-2 Sequence 2, Appl
996 26 54.2 194 2 US-09-248-796A-21702 Sequence 21702, A
997 26 54.2 194 2 US-09-107-433-4587 Sequence 4587, Ap
998 26 54.2 199 2 US-09-461-697-93 Sequence 93, Appl
999 26 54.2 200 2 US-09-252-991A-19243 Sequence 19243, A
1000 26 54.2 200 2 US-09-489-039A-9886 Sequence 9886, Ap

ALIGNMENTS

RESULT 1
US-08-787-547-105
Sequence 105, Application US/08787547
Patent No. 5783567
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Curley, Joanne M.
APPLICANT: Langer, Robert S.
TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY
TITLE OF INVENTION: OF NUCLEIC ACID
NUMBER OF SEQUENCES: 107
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/787,547
FILING DATE: 22-JAN-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 105:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-787-547-105

Query Match 100.0%; Score 48; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||
DB 1 TLHEYMIDL 9

US-08-197-484-69

Sequence 69, Application US/08197484
Patent No. 6419931
GENERAL INFORMATION:
APPLICANT: VITTELLO, Maria A.
APPLICANT: CHESTNUT, Robert W.
APPLICANT: SETTE, Alessandro D.
APPLICANT: CELIS, Esben
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Kourie and Crew
STREET: Stewart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-197-484-69

Query Match 100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9

Db 1 TLHEWMLDL 9

RESULT 3
US-10-365-908-4
Sequence 4, Application US/10365908
Patent No. 6797491
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/365,908
CURRENT FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO: 4
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-365-908-4

Query Match 100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEWMLDL 9
Db 1 TLHEWMLDL 9

RESULT 4
PCT-US95-02121-69
Sequence 69, Application PC/TUS9502121
GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/02121
FILING DATE: 16-FEB-1995
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 06/197,484
FILING DATE: 16-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.

REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4PC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
PCT-US95-02121-69

Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEWMLDL 9
Db 1 TLHEWMLDL 9

RESULT 5
US-10-365-908-49
Sequence 49, Application US/10365908
Patent No. 6797491
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/365,908
CURRENT FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO: 49
LENGTH: 10
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-365-908-49

Query Match 100.0%; Score 48; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0046;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEWMLDL 9
Db 2 TLHEWMLDL 10

RESULT 6
US-08-075-541D-34
Sequence 34, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESSES:
ADDRESSEE: PANITCH SCHWARZ JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA

STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU Pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-34

Query Match 100.0%; Score 48; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.0087;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDL 9
Db 7 TLHEYMDL 15

RESULT 7
US-08-934-915-46
Sequence 46, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: CHENG, HWEE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Fouch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-46

Query Match 100.0%; Score 48; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0098;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDL 9
Db 6 TLHEYMDL 14

RESULT 8
US-08-075-541D-43
Sequence 43, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU Pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide
US-08-075-541D-43

Query Match 100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0098;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEHYMDL 9
| | | | |
DB 7 TLHEHYMDL 15

RESULT 9

US-08-075-541D-44
Sequence 44, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: PRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULAR TYPE: peptide
US-08-075-541D-44

Query Match 100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0098;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEHYMDL 9
| | | | |
DB 2 TLHEHYMDL 10

RESULT 10
US-09-980-177A-69
Sequence 69, Application US/09980177A

Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Jochims, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus LI-Protein and Use Thereof in Diagnosis and
TITLE OF INVENTION: Therapy
FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/09/980,177A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 69
LENGTH: 20
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-980-177A-69

Query Match 100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0098;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEHYMDL 9
| | | | |
DB 7 TLHEHYMDL 15

RESULT 11

US-09-980-523A-14
Sequence 14, Application US/09980523A
Patent No. 6783763
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCES
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 AND E7
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: WO/1 AO INS
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR 99/07012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 14
LENGTH: 23
TYPE: PRT
ORGANISM: Human Papillomavirus
US-09-980-523A-14

Query Match 100.0%; Score 48; DB 2; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEHYMDL 9
| | | | |
DB 5 TLHEHYMDL 13

RESULT 12
US-08-363-586-1
Sequence 1, Application US/08363586
Patent No. 5629161
GENERAL INFORMATION:

```

APPLICANT: Mueller, Martin
APPLICANT: Gissmann, Lutz
TITLE OF INVENTION: Use of HPV-16 E6 and E7-Gene Derived
TITLE OF INVENTION: Peptides for the Diagnostic Purpose
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESSES:
ADDRESS: Finnegan, Henderson, Farabow, Garrett &
ADDRESS: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/363,586
FILING DATE: 23-DEC-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/909,296
FILING DATE: 09-JUL-1992
APPLICATION NUMBER: EP 9111720.8
FILING DATE: 13-JUL-1991
ATTORNEY/AGENT INFORMATION:
NAME: Wadler, Linda A.
REGISTRATION NUMBER: 33,218
REFERENCE/DOCKET NUMBER: 02481-1195-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-363-586-1

Query Match          100.0%; Score 48; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. NO. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 TLHEYMDDL 9
    |||||
    |||||
Db 2 TLHEYMDDL 10

RESULT 13
US-08-934-915-51
; Sequence 51, Application US/08934915
; Patent No. 5932412
; GENERAL INFORMATION:
; APPLICANT: DILLNER, JOAKIM
; APPLICANT: DILLNER, LENA
; APPLICANT: CHENG, HWEI-MING
; TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
; TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
; TITLE OF INVENTION: USEFUL IN IMMUNOSSAY FOR
; TITLE OF INVENTION: DIAGNOSTIC PURPOSES
; NUMBER OF SEQUENCES: 193
; CORRESPONDENCE ADDRESS:
; ADDRESS: MASON & ASSOCIATES, P.A.
; STREET: 1757 U.S. HWY. 19 NORTH, SUITE 500
; CITY: CLEARWATER
; STATE: FLORIDA
; COUNTRY: U.S.A.
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```

```

COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
INFORMATION FOR SEQ ID NO: 51:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-51

Query Match          100.0%; Score 48; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. NO. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 TLHEYMDDL 9
    |||||
    |||||
Db 6 TLHEYMDDL 14

RESULT 14
US-09-486-394-1
; Sequence 1, Application US/09486394
; Patent No. 6478749
; GENERAL INFORMATION:
; APPLICANT: Hopfl, Reinhard
; TITLE OF INVENTION: Diagnostic Kit for Skin Tests, and Method
; FILE REFERENCE: 032929-001
; CURRENT APPLICATION NUMBER: US/09/486,394
; CURRENT FILING DATE: 2000-06-20
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: DE 197 37 409.3
; PRIOR FILING DATE: 1997-08-27
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 1
; LENGTH: 30
; TYPE: PPT
; ORGANISM: Human papillomavirus type 16
; FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (1)..(30)
; OTHER INFORMATION: E7 peptide.
US-09-486-394-1

Query Match          100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. NO. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 TLHEYMDDL 9
    |||||
    |||||
Db 7 TLHEYMDDL 15

RESULT 15
US-09-828-645-3
; Sequence 3, Application US/09828645
```

```
; Patent No. 6743593
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-3

Query Match          100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
   |||||
Db 2 TLHEYMDDL 10

RESULT 16
US-09-828-645-7
; Sequence 7, Application US/09828645
; Patent No. 6743593
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: Xaa = L-carboxymethylcysteine
US-09-828-645-7

Query Match          100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
   |||||
Db 2 TLHEYMDDL 10

RESULT 17
US-08-406-248-6
; Sequence 6, Application US/08406248
; Patent No. 5736318
; GENERAL INFORMATION:
; APPLICANT: Munger, Karl
; APPLICANT: Jones, D. Leanne
; TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
; TITLE OF INVENTION: TRANSFORMED CELLS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
```

```
ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kusner
STREET: 200 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/406,248
FILING DATE:
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: McDanielis, Patricia A.
REGISTRATION NUMBER: 33,194
REFERENCE/DOCKET NUMBER: HAZ-011
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-406-248-6

Query Match          100.0%; Score 48; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
   |||||
Db 7 TLHEYMDDL 15

RESULT 18
US-08-075-541D-42
; Sequence 42, Application US/08075541D
; Patent No. 6181745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU Pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: Pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
```

NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 42:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-42

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 19
US-09-382-616A-1
Sequence 1, Application US/09382616A
Patent No. 6200746
GENERAL INFORMATION:
APPLICANT: Fleher, Christopher
APPLICANT: He, Manxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/382,616A
CURRENT FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-382-616A-1

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 20
US-08-944-368A-4
Sequence 4, Application US/08944368A
Patent No. 6228368
GENERAL INFORMATION:
APPLICANT: Gisman, et al.
TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine
TITLE OF INVENTION: Formulations and Methods of Use
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Borun
STREET: 233 South Wacker Drive, 6300 Sears Tower
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/944,368A
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27013/34028
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-944-368A-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 21
US-09-820-764-4
Sequence 4, Application US/09820764
Patent No. 6352696
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,764
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-764-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 22
US-09-613-303-8
Sequence 8, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613.303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 23
US-09-566-420-19
Sequence 19, Application US/09566420
Patent No. 6500641
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/09/566,420
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-09-566-420-19

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9

Db 7 TLHEYMIDL 15

RESULT 24
US-09-986-118A-4
Sequence 4, Application US/09986118A
Patent No. 6562351
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALBER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. 6562351-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 25
US-09-728-466-1
Sequence 1, Application US/09728466
Patent No. 6641994
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Manxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMDDL 9
Db 7 TLHEYMDDL 15

RESULT 26
US-09-824-017-4
Sequence 4, Application US/09824017
Patent No. 6649167
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander

TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE

NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:

ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017

FILING DATE: 03-Apr-2001
CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896

FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:

NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298

REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:

TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids

TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:

US-09-824-017-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMDDL 9
Db 7 TLHEYMDDL 15

RESULT 27
US-10-267-311-8
Sequence 8, Application US/10267311
Patent No. 6657055

GENERAL INFORMATION:

APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall

APPLICANT: Mizen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO

FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311

CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303

PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757

PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55

SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8

LENGTH: 98
TYPE: PRT

ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMDDL 9
Db 7 TLHEYMDDL 15

RESULT 28
US-10-201-764-19
Sequence 19, Application US/10201764
Patent No. 6716623

GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU

TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE

FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/201,764

CURRENT FILING DATE: 2002-07-22
PRIOR APPLICATION NUMBER: US/09/566,420

PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752

PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750

PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19

SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19

LENGTH: 98
TYPE: PRT

ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMDDL 9
Db 7 TLHEYMDDL 15

RESULT 29
US-09-637-746-3
Sequence 3, Application US/09637746
Patent No. 6727079

GENERAL INFORMATION:

APPLICANT: Thorgelsson, Snorri S.
APPLICANT: Woltsch, Joseph T.

APPLICANT: Zhang, Minghuang

TITLE OF INVENTION: cDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTEIN
TITLE OF INVENTION: PRODUCT
FILE REFERENCE: 11613.29USM1
CURRENT APPLICATION NUMBER: US/09/637,746
PRIOR FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: PCT/US99/04142
PRIOR FILING DATE: 1999-02-25
PRIOR APPLICATION NUMBER: US 60/079,567
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: US 60/075,922
PRIOR FILING DATE: 1998-02-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-637-746-3

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||||
Db 7 TLHEYMIDL 15

RESULT 30
US-09-501-097A-7
Sequence 7, Application US/09501097A
Patent No. 6734173
GENERAL INFORMATION:
APPLICANT: Tzyy-Chouu Wu
APPLICANT: Chien-Fu Hung
TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
FILE REFERENCE: 2240-169349
CURRENT APPLICATION NUMBER: US/09/501,097A
CURRENT FILING DATE: 2000-02-09
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 7
LENGTH: 98
TYPE: PRT
ORGANISM: human papillomavirus
US-09-501-097A-7

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||||
Db 7 TLHEYMIDL 15

RESULT 31
US-09-980-523A-12
Sequence 12, Application US/09980523A
Patent No. 6783763
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUTLEIT, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
PARTICULARLY IN VACCINATION
FILE REFERENCE: WO1 AO INS
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513

PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR 99/07012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 12
LENGTH: 98
TYPE: PRT
ORGANISM: Human Papillomavirus
US-09-980-523A-12

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||||
Db 7 TLHEYMIDL 15

RESULT 32
US-09-613-303-12
Sequence 12, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 12
LENGTH: 121
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-12

Query Match 100.0%; Score 48; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||||
Db 30 TLHEYMIDL 38

RESULT 33
US-10-267-311-12
Sequence 12, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 12
LENGTH: 121

;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: fusion sequence
US-10-267-311-12

Query Match 100.0%; Score 48; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 30 TLHEYMDDL 38

RESULT 34
US-08-860-165-12
; Sequence 12, Application US/08860165A
; Patent No. 6004557
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; PRIOR FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patentn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-12

Query Match 100.0%; Score 48; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 105 TLHEYMDDL 113

RESULT 35
US-09-359-382-12
; Sequence 12, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; PRIOR FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patentn Ver. 2.0
; SEQ ID NO 12

;; LENGTH: 172
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-09-359-382-12

Query Match 100.0%; Score 48; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 105 TLHEYMDDL 113

RESULT 36
US-09-462-993-2
; Sequence 2, Application US/09462993
; Patent No. 6884786
; GENERAL INFORMATION:
; APPLICANT: KIENY, Marie-Paule
; APPLICANT: BALLOUL, Jean-Marc
; APPLICANT: BIZOUARNE, Nedine
; TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
; TITLE OF INVENTION: POLYPEPTIDE WITH MODIFIED CELL LOCATION
; FILE REFERENCE: 017753-122
; CURRENT APPLICATION NUMBER: US/09/462,993
; PRIOR FILING DATE: 2000-04-17
; PRIOR APPLICATION NUMBER: PCT/FR98/01576
; PRIOR FILING DATE: 1998-07-17
; PRIOR APPLICATION NUMBER: FR 97/09152
; PRIOR FILING DATE: 1997-07-18
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: Patentn Ver. 2.2
; SEQ ID NO 2
; LENGTH: 185
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from human papillomavirus, strain
; OTHER INFORMATION: HPV-16, E7 fusion signals of the rabies
; OTHER INFORMATION: glycoprotein, clone E7*TW.
US-09-462-993-2

Query Match 100.0%; Score 48; DB 2; Length 185;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 32 TLHEYMDDL 40

RESULT 37
US-09-613-303-35
; Sequence 35, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 35
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:

OTHER INFORMATION: fusion sequence
US-09-613-303-35

Query Match 100.0%; Score 48; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMULD 9
|||||
DB 107 TLHEYMULD 115

RESULT 38
US-10-267-311-35
Sequence 35, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Maryin
APPLICANT: Chu, N. Randall
APPLICANT: Mizen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 35
LENGTH: 198
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-35

Query Match 100.0%; Score 48; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMULD 9
|||||
DB 107 TLHEYMULD 115

RESULT 39
US-09-485-885-1
Sequence 1, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabazon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 1
LENGTH: 220
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-1

Query Match 100.0%; Score 48; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMULD 9
|||||
DB 120 TLHEYMULD 128

RESULT 40
US-09-485-885-8
Sequence 8, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabazon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 8
LENGTH: 220
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-8

Query Match 100.0%; Score 48; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMULD 9
|||||
DB 120 TLHEYMULD 128

RESULT 41
US-09-485-885-12
Sequence 12, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabazon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 12
LENGTH: 239
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-12

Query Match 100.0%; Score 48; DB 2; Length 239;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 THEHYMDL 9
| | | | |
DB 139 THEHYMDL 147

RESULT 42
US-08-459-818-20
; Sequence 20, Application US/08459818
; Patent No. 5851795
; GENERAL INFORMATION:
; APPLICANT: Linsley, Peter S.
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Damle, Nitin K.
; APPLICANT: Brady, William
; TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 11150 Santa Monica Blvd., Suite 400
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: FastSeq 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/459,818
; FILING DATE: 02-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Adriano, Sarah B.
; REGISTRATION NUMBER: 34,470
; REFERENCE/DOCKET NUMBER: 30436.35US02
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 310-445-1140
; TELEFAX: 310-445-9031
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 253 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-459-818-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 THEHYMDL 9
| | | | |
DB 162 THEHYMDL 170

RESULT 43
US-08-889-666-20
; Sequence 20, Application US/08889666
; Patent No. 588579
; GENERAL INFORMATION:
; APPLICANT: Linsley, Peter S.
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Damle, Nitin K.
; APPLICANT: Brady, William
; APPLICANT: Kiener, Peter A.
; TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 11150 Santa Monica Blvd., Suite 400

CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/889,666
FILING DATE: 08-JUL-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-889-666-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 THEHYMDL 9
| | | | |
DB 162 THEHYMDL 170

RESULT 44
US-08-465-078-20
; Sequence 20, Application US/08465078
; Patent No. 5885796
; GENERAL INFORMATION:
; APPLICANT: Linsley, Peter S.
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Damle, Nitin K.
; APPLICANT: Brady, William
; APPLICANT: Kiener, Peter A.
; TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 11150 Santa Monica Blvd., Suite 400
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,078
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/375390
; FILING DATE: 18-JAN-1995

ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-465-078-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEVWLDL 9
Db 162 TLHEVWLDL 170

RESULT 45
US-08-725-776-20
Sequence 20, Application US/08725776
Patent No. 5968510
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Mitin K.
APPLICANT: Brady, William
APPLICANT: Klenner, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,776
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-725-776-20

Query Match 100.0%; Score 48; DB 1; Length 253;

Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 TLHEVWLDL 9
Db 162 TLHEVWLDL 170

RESULT 46
US-08-488-062-20
Sequence 20, Application US/08488062
Patent No. 5977318
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Mitin K.
APPLICANT: Brady, William
APPLICANT: Klenner, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,062
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-488-062-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEVWLDL 9
Db 162 TLHEVWLDL 170

RESULT 47
US-08-117-083-9
Sequence 9, Application US/08117083
Patent No. 5719054
GENERAL INFORMATION:
APPLICANT: Boursnell, Michael E.
APPLICANT: Inglis, Stephen C.
APPLICANT: Munro, Alan J.
TITLE OF INVENTION: Recombinant Virus Vectors Encoding Human

```

; TITLE OF INVENTION: Papilloma Virus Proteins
; NUMBER OF SEQUENCES: 70
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Walter H. Dreyer
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/117,083
; FILING DATE: 10-SEP-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Dreyer, Walter H.
; REGISTRATION NUMBER: 24,190
; REFERENCE/DOCKET NUMBER: A-58783
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-781-1989
; TELEFAX: 415-398-3249
; TELEX: 910 277299
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..263
; OTHER INFORMATION: /note="Xaa refers to stop codon in
; US-08-117-083-9
; OTHER INFORMATION: the open reading frame."
;
Query Match 100.0%; Score 48; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
DB 168 TLHEYMIDL 176

RESULT 48
US-08-860-165-10
; Sequence 10, Application US/08860165A
; Patent No. 6004557
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Scirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; PRIOR FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU P0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
```

```

; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
; US-08-860-165-10
;
Query Match 100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
DB 167 TLHEYMIDL 175

RESULT 49
US-09-359-382-10
; Sequence 10, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Scirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; PRIOR FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU P0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; US-09-359-382-10
;
Query Match 100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
DB 167 TLHEYMIDL 175

RESULT 50
US-09-367-309A-1
; Sequence 1, Application US/09367309A
; Patent No. 6428607
; GENERAL INFORMATION:
; APPLICANT: MACFARLAN, RODERICK I.
; APPLICANT: MALLIAROS, JIM
; TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
; FILE REFERENCE: 017227/0149
; CURRENT APPLICATION NUMBER: US/09/367,309A
; PRIOR FILING DATE: 1999-08-11
; PRIOR APPLICATION NUMBER: PCT/AU98/00080
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: AU PO 5178
; PRIOR FILING DATE: 1997-02-19
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; US-09-367-309A-1
;
Query Match 100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.17;
```


Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHRYMLDL 9
Db 167 TLHRYMLDL 175

Search completed: May 5, 2006, 03:12:58
Job time : 24.7 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 07:56:48 ; Search time 56 Seconds
(without alignments)
67.151 Million cell updates/sec

Title: US-08-170-344-13
Perfect score: 48
Sequence: 1 TLHEXYMLDL 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues
Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database :
1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
4: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	48	100.0	9	3	US-09-891-823-4	Sequence 4, App1
2	48	100.0	9	3	US-09-909-460-105	Sequence 105, App
3	48	100.0	9	3	US-09-872-836-105	Sequence 105, App
4	48	100.0	9	4	US-10-128-711-69	Sequence 69, App1
5	48	100.0	9	4	US-10-133-210-270	Sequence 270, App
6	48	100.0	9	4	US-10-365-808-4	Sequence 4, App1
7	48	100.0	9	5	US-10-871-138-4	Sequence 4, App1
8	48	100.0	9	5	US-10-758-970-105	Sequence 105, App
9	48	100.0	9	5	US-10-751-845-59	Sequence 59, App
10	48	100.0	9	5	US-10-924-377-4	Sequence 4, App1
11	48	100.0	10	3	US-09-891-823-49	Sequence 49, App1
12	48	100.0	10	4	US-10-365-908-49	Sequence 49, App1
13	48	100.0	10	5	US-10-871-138-49	Sequence 49, App1
14	48	100.0	15	4	US-10-648-547-69	Sequence 69, App1
15	48	100.0	15	4	US-10-648-547-92	Sequence 92, App1
16	48	100.0	15	4	US-10-476-570-45	Sequence 45, App1
17	48	100.0	15	4	US-10-306-541-69	Sequence 69, App1
18	48	100.0	15	4	US-10-306-541-92	Sequence 92, App1
19	48	100.0	19	5	US-10-751-845-67	Sequence 67, App1
20	48	100.0	20	4	US-10-432-465-14	Sequence 44, App1
21	48	100.0	20	4	US-10-476-570-14	Sequence 14, App1
22	48	100.0	20	5	US-10-890-526-69	Sequence 69, App1
23	48	100.0	21	4	US-10-476-570-15	Sequence 15, App1
24	48	100.0	23	4	US-10-476-570-57	Sequence 57, App1
25	48	100.0	23	5	US-10-858-384-14	Sequence 14, App1
26	48	100.0	30	3	US-09-828-645-3	Sequence 3, App1
27	48	100.0	30	3	US-09-828-645-7	Sequence 7, App1

28	48	100.0	30	5	US-10-827-007-3	Sequence 3, App1
29	48	100.0	30	5	US-10-827-007-7	Sequence 7, App1
30	48	100.0	30	5	US-10-827-083-3	Sequence 3, App1
31	48	100.0	30	5	US-10-827-083-7	Sequence 7, App1
32	48	100.0	98	3	US-09-728-466-1	Sequence 1, App1
33	48	100.0	98	3	US-09-820-765-4	Sequence 4, App1
34	48	100.0	98	3	US-09-824-017-4	Sequence 4, App1
35	48	100.0	98	3	US-09-966-118A-4	Sequence 8, App1
36	48	100.0	98	4	US-10-267-311-8	Sequence 8, App1
37	48	100.0	98	4	US-10-177-390-8	Sequence 8, App1
38	48	100.0	98	4	US-10-201-764-19	Sequence 19, App1
39	48	100.0	98	4	US-10-392-113-29	Sequence 29, App1
40	48	100.0	98	4	US-10-654-129-4	Sequence 4, App1
41	48	100.0	98	4	US-10-681-410-19	Sequence 19, App1
42	48	100.0	98	4	US-10-772-988-3	Sequence 3, App1
43	48	100.0	98	4	US-10-479-541-5	Sequence 5, App1
44	48	100.0	98	5	US-10-042-526A-4	Sequence 4, App1
45	48	100.0	98	5	US-10-657-399-1	Sequence 1, App1
46	48	100.0	98	5	US-10-858-384-12	Sequence 12, App1
47	48	100.0	98	5	US-10-484-063-26	Sequence 26, App1
48	48	100.0	98	5	US-10-343-448-5	Sequence 5, App1
49	48	100.0	98	5	US-10-367-956-8	Sequence 8, App1
50	48	100.0	98	5	US-10-367-057-17	Sequence 17, App1
51	48	100.0	98	6	US-11-077-939-5	Sequence 5, App1
52	48	100.0	99	4	US-10-115-440-7	Sequence 7, App1
53	48	100.0	111	4	US-10-472-724-4	Sequence 4, App1
54	48	100.0	117	5	US-10-751-845-126	Sequence 126, App
55	48	100.0	121	4	US-10-267-311-12	Sequence 12, App1
56	48	100.0	121	5	US-10-679-956-12	Sequence 12, App1
57	48	100.0	185	6	US-11-072-288-2	Sequence 2, App1
58	48	100.0	198	4	US-10-267-311-35	Sequence 35, App1
59	48	100.0	198	5	US-10-679-956-35	Sequence 35, App1
60	48	100.0	220	4	US-10-000-903-1	Sequence 1, App1
61	48	100.0	220	4	US-10-000-903-8	Sequence 8, App1
62	48	100.0	220	5	US-10-899-771-12	Sequence 1, App1
63	48	100.0	220	5	US-10-899-771-8	Sequence 8, App1
64	48	100.0	236	5	US-10-751-845-157	Sequence 157, App
65	48	100.0	237	5	US-10-751-845-158	Sequence 158, App
66	48	100.0	239	4	US-10-000-903-12	Sequence 12, App1
67	48	100.0	239	5	US-10-899-771-12	Sequence 12, App1
68	48	100.0	261	5	US-10-751-845-160	Sequence 160, App
69	48	100.0	266	3	US-09-367-309A-1	Sequence 1, App1
70	48	100.0	289	4	US-10-115-440-5	Sequence 5, App1
71	48	100.0	295	4	US-10-267-311-33	Sequence 33, App1
72	48	100.0	295	5	US-10-679-956-33	Sequence 33, App1
73	48	100.0	324	4	US-10-267-311-25	Sequence 25, App1
74	48	100.0	324	5	US-10-679-956-25	Sequence 25, App1
75	48	100.0	334	4	US-10-472-724-10	Sequence 10, App1
76	48	100.0	371	4	US-10-000-903-6	Sequence 6, App1
77	48	100.0	371	5	US-10-899-771-6	Sequence 6, App1
78	48	100.0	390	4	US-10-000-903-14	Sequence 14, App1
79	48	100.0	390	5	US-10-899-771-14	Sequence 14, App1
80	48	100.0	421	4	US-10-296-770-7	Sequence 7, App1
81	48	100.0	488	4	US-10-367-095-8	Sequence 8, App1
82	48	100.0	488	4	US-10-368-046-8	Sequence 8, App1
83	48	100.0	488	4	US-10-367-367-8	Sequence 8, App1
84	48	100.0	488	5	US-10-918-337-8	Sequence 8, App1
85	48	100.0	493	4	US-10-267-311-19	Sequence 19, App1
86	48	100.0	493	5	US-10-679-956-19	Sequence 19, App1
87	48	100.0	639	4	US-10-267-311-17	Sequence 17, App1
88	48	100.0	639	5	US-10-679-956-17	Sequence 17, App1
89	48	100.0	641	4	US-10-267-311-51	Sequence 51, App1
90	48	100.0	641	5	US-10-679-956-51	Sequence 51, App1
91	48	100.0	647	5	US-10-679-956-53	Sequence 53, App1
92	48	100.0	647	5	US-10-679-956-53	Sequence 53, App1
93	48	100.0	648	5	US-10-679-956-29	Sequence 29, App1
94	48	100.0	711	4	US-10-267-311-41	Sequence 41, App1
95	48	100.0	711	5	US-10-679-956-41	Sequence 41, App1
96	48	100.0	724	4	US-10-267-311-45	Sequence 45, App1
97	48	100.0	724	5	US-10-679-956-45	Sequence 45, App1
98	48	100.0	805	4	US-10-367-095-9	Sequence 9, App1
99	48	100.0	805	4	US-10-368-046-9	Sequence 9, App1
100	48	100.0				

101	48	100.0	805	4	US-10-367-367-9	Sequence 9, Appli	174	32	66.7	159	4	US-10-424-599-258138	Sequence 258138,
102	48	100.0	805	5	US-10-918-337-9	Sequence 9, Appli	175	32	66.7	171	4	US-10-425-114-52691	Sequence 52691, A
103	44	91.7	10	5	US-10-484-063-11	Sequence 11, Appli	176	32	66.7	203	3	US-09-738-626-6474	Sequence 6474, Ap
104	44	91.7	21	5	US-09-367-309A-5	Sequence 5, Appli	177	32	66.7	241	4	US-10-424-599-224913	Sequence 224913,
105	43	89.6	9	5	US-10-924-377-5	Sequence 5, Appli	178	32	66.7	253	4	US-10-424-599-408135	Sequence 208135,
106	39	81.2	9	5	US-10-924-377-6	Sequence 6, Appli	179	32	66.7	264	4	US-10-437-963-175433	Sequence 175433,
107	39	81.2	15	4	US-10-476-570-46	Sequence 46, Appli	180	32	66.7	266	4	US-10-767-701-11169	Sequence 11169, A
108	38	79.2	9	2	US-08-344-824-137	Sequence 137, App	181	32	66.7	298	4	US-10-425-115-137362	Sequence 137362
109	38	79.2	9	3	US-09-891-823-7	Sequence 7, Appli	182	32	66.7	303	4	US-10-425-114-65300	Sequence 65300, A
110	38	79.2	9	4	US-10-365-908-7	Sequence 7, Appli	183	32	66.7	303	4	US-10-425-115-37360	Sequence 337360,
111	38	79.2	9	5	US-10-871-138-7	Sequence 7, Appli	184	32	66.7	306	4	US-10-425-115-37363	Sequence 337363,
112	38	79.2	18	5	US-10-751-845-108	Sequence 108, App	185	32	66.7	318	4	US-10-425-115-193174	Sequence 193174
113	38	79.2	9	5	US-10-924-377-3	Sequence 3, Appli	186	32	66.7	332	4	US-10-425-114-62181	Sequence 62181, A
114	38	79.2	10	4	US-10-365-908-11	Sequence 11, Appli	187	32	66.7	332	4	US-10-425-114-64746	Sequence 64746, A
115	38	79.2	10	4	US-10-871-138-11	Sequence 11, Appli	188	32	66.7	336	4	US-10-425-114-67444	Sequence 67444, A
116	38	79.2	10	5	US-10-871-138-11	Sequence 11, Appli	189	32	66.7	366	5	US-10-954-778-107	Sequence 107, App
117	36	75.0	874	4	US-10-437-963-115848	Sequence 115848,	190	32	66.7	381	4	US-10-282-122A-76607	Sequence 76607, A
118	35	72.9	54	3	US-09-864-761-40216	Sequence 40216, A	191	32	66.7	420	4	US-10-369-493-19568	Sequence 19568, A
119	35	72.9	113	3	US-09-452-239-16	Sequence 16, Appli	192	32	66.7	420	4	US-10-369-493-19607	Sequence 19607, A
120	35	72.9	115	4	US-10-437-963-103358	Sequence 103358,	193	32	66.7	425	4	US-10-282-122A-76368	Sequence 76368, A
121	35	72.9	148	4	US-10-437-963-103356	Sequence 103356,	194	32	66.7	441	4	US-10-425-114-50305	Sequence 50305, A
122	35	72.9	276	4	US-10-437-963-142054	Sequence 142054,	195	32	66.7	472	3	US-09-738-626-6752	Sequence 6752, Ap
123	35	72.9	401	6	US-11-105-344-3	Sequence 3, Appli	196	32	66.7	522	4	US-10-425-114-68943	Sequence 68943, A
124	35	72.9	495	3	US-09-880-708-10	Sequence 10, Appli	197	32	66.7	602	4	US-10-425-115-193175	Sequence 193175,
125	35	72.9	501	2	US-08-981-490B-1	Sequence 1, Appli	198	32	66.7	624	4	US-10-231-353-24	Sequence 24, Appli
126	35	72.9	501	3	US-09-730-772-13	Sequence 13, Appli	199	32	66.7	624	6	US-11-128-073-28	Sequence 28, Appli
127	35	72.9	501	3	US-09-735-849-13	Sequence 13, Appli	200	32	66.7	656	4	US-10-425-114-57946	Sequence 57946, A
128	35	72.9	501	3	US-09-574-819-13	Sequence 13, Appli	201	32	66.7	662	4	US-10-425-115-193177	Sequence 193177,
129	35	72.9	501	4	US-10-379-830-13	Sequence 13, Appli	202	32	66.7	673	5	US-10-496-905-516	Sequence 516, App
130	35	72.9	501	4	US-10-164-279-53	Sequence 53, Appli	203	32	66.7	673	5	US-10-496-905-519	Sequence 519, App
131	35	72.9	501	4	US-10-356-513-1	Sequence 1, Appli	204	32	66.7	695	4	US-10-312-273-251	Sequence 251, App
132	35	72.9	501	4	US-10-356-513-5	Sequence 5, Appli	205	32	66.7	703	4	US-10-289-762-490	Sequence 490, App
133	35	72.9	501	4	US-10-800-917-2	Sequence 2, Appli	206	32	66.7	712	4	US-10-231-353-22	Sequence 22, Appli
134	35	72.9	501	6	US-11-080-494-1	Sequence 1, Appli	207	32	66.7	712	6	US-11-128-073-22	Sequence 22, Appli
135	35	72.9	502	3	US-09-813-398-37	Sequence 37, Appli	208	32	66.7	716	4	US-10-369-493-2175	Sequence 2175, Ap
136	35	72.9	503	5	US-10-826-324-37	Sequence 37, Appli	209	32	66.7	747	4	US-10-282-122A-69873	Sequence 69873, A
137	35	72.9	833	4	US-10-437-963-125632	Sequence 125632,	210	32	66.7	765	4	US-10-301-015-2	Sequence 2, Appli
138	35	72.9	1527	4	US-10-437-963-200899	Sequence 200899,	211	32	66.7	793	4	US-10-231-353-12	Sequence 12, Appli
139	34	70.8	9	5	US-10-924-377-2	Sequence 2, Appli	212	32	66.7	793	6	US-11-128-073-28	Sequence 28, Appli
140	34	70.8	36	4	US-10-424-599-261923	Sequence 261923,	213	32	66.7	937	4	US-10-437-963-107942	Sequence 107942,
141	34	70.8	46	4	US-10-437-963-167603	Sequence 167603,	214	32	66.7	983	4	US-10-047-757-2	Sequence 2, Appli
142	34	70.8	152	4	US-10-425-115-251602	Sequence 251602,	215	32	66.7	986	5	US-10-481-032A-538	Sequence 538, App
143	34	70.8	330	6	US-11-097-143-21243	Sequence 21243, A	216	32	66.7	991	4	US-10-231-353-12	Sequence 12, Appli
144	34	70.8	430	4	US-10-437-963-192450	Sequence 192450,	217	32	66.7	991	6	US-11-128-073-12	Sequence 12, Appli
145	34	70.8	440	4	US-10-094-749-1912	Sequence 1912, Ap	218	32	66.7	1004	5	US-10-481-032A-166	Sequence 166, App
146	34	70.8	802	4	US-10-369-493-22100	Sequence 22100, A	219	32	66.7	1006	4	US-10-437-963-107945	Sequence 107945,
147	34	70.8	1032	3	US-09-815-242-11145	Sequence 11145, A	220	32	66.7	1020	4	US-10-437-963-120996	Sequence 120996,
148	34	70.8	1032	4	US-10-282-122A-58344	Sequence 58344, A	221	32	66.7	1069	6	US-10-231-353-2	Sequence 2, Appli
149	33	68.8	63	4	US-10-425-115-301566	Sequence 301566,	222	32	66.7	1069	6	US-11-128-073-8	Sequence 8, Appli
150	33	68.8	118	5	US-10-424-599-189402	Sequence 189402,	223	32	66.7	1072	6	US-10-231-353-18	Sequence 18, Appli
151	33	68.8	118	5	US-10-501-282-2890	Sequence 2890, Ap	224	32	66.7	1072	6	US-10-128-073-18	Sequence 18, Appli
152	33	68.8	137	5	US-10-501-282-2892	Sequence 2892, Ap	225	32	66.7	1109	5	US-10-450-763-42830	Sequence 42830, A
153	33	68.8	227	4	US-10-424-599-191814	Sequence 191814,	226	32	66.7	1116	4	US-10-369-493-18965	Sequence 18965, A
154	33	68.8	232	4	US-10-424-599-245939	Sequence 245939,	227	32	66.7	1127	6	US-11-097-143-8172	Sequence 8172, Ap
155	33	68.8	238	4	US-10-282-122A-71744	Sequence 71744, A	228	32	66.7	1150	4	US-10-231-353-8	Sequence 8, Appli
156	33	68.8	339	4	US-10-425-115-201126	Sequence 201126,	229	32	66.7	1150	6	US-11-128-073-8	Sequence 8, Appli
157	33	68.8	340	4	US-10-437-963-161840	Sequence 161840,	230	32	66.7	1170	4	US-10-208-731-6	Sequence 6, Appli
158	33	68.8	413	3	US-09-930-512-76	Sequence 76, Appli	231	32	66.7	1170	6	US-11-097-143-36009	Sequence 36009, A
159	33	68.8	455	4	US-10-437-963-165555	Sequence 165555,	232	32	66.7	1581	4	US-10-437-963-110375	Sequence 110375,
160	33	68.8	622	6	US-11-097-143-41607	Sequence 41607, A	233	32	66.7	350	5	US-10-723-860-1801	Sequence 1801, Ap
161	33	68.8	926	4	US-10-369-493-5949	Sequence 5949, Ap	234	32	66.7	10	4	US-10-083-768-74	Sequence 74, Appli
162	33	68.8	966	6	US-11-097-143-41847	Sequence 41847, A	235	31	64.6	15	4	US-10-648-547-80	Sequence 80, Appli
163	33	68.8	1135	4	US-10-389-566-689	Sequence 689, App	236	31	64.6	15	4	US-10-306-541-80	Sequence 80, Appli
164	33	68.8	1135	4	US-10-389-566-1109	Sequence 1109, Ap	237	31	64.6	48	4	US-10-425-115-222556	Sequence 222556,
165	33	68.8	1145	4	US-10-437-963-135969	Sequence 135969,	238	31	64.6	54	4	US-10-425-115-30764	Sequence 30764, A
166	33	68.8	1201	6	US-11-097-143-39342	Sequence 39342, A	239	31	64.6	70	4	US-10-425-115-303761	Sequence 303761,
167	32	66.7	40	4	US-10-425-115-284892	Sequence 284892,	240	31	64.6	72	4	US-10-425-115-368667	Sequence 368667,
168	32	66.7	49	4	US-10-424-599-208137	Sequence 208137,	241	31	64.6	76	3	US-09-110-716-39	Sequence 39, Appli
169	32	66.7	53	4	US-10-425-115-201438	Sequence 201438,	242	31	64.6	85	4	US-10-195-144-69	Sequence 69, Appli
170	32	66.7	61	4	US-10-425-115-354913	Sequence 354913,	243	31	64.6	85	4	US-10-345-072-69	Sequence 69, Appli
171	32	66.7	66	4	US-10-424-599-273088	Sequence 273088,	244	31	64.6	95	3	US-09-934-054-12	Sequence 12, Appli
172	32	66.7	87	5	US-10-496-905-524	Sequence 524, App	245	31	64.6	95	3	US-09-985-911-27	Sequence 27, Appli
173	32	66.7	105	4	US-10-425-114-43381	Sequence 43381, A	246	31	64.6	95	5	US-10-480-693-28	Sequence 28, Appli

247	31	64.6	95	5	US-10-820-136-27	Sequence 27, App1	320	31	64.6	367	5	US-10-739-930-8488	Sequence 8488, Ap
248	31	64.6	99	4	US-10-425-115-216015	Sequence 216015,	321	31	64.6	373	4	US-10-437-963-197660	Sequence 197660,
249	31	64.6	100	4	US-10-724-972A-6142	Sequence 6142, Ap	322	31	64.6	375	4	US-10-437-963-119783	Sequence 119783,
250	31	64.6	104	4	US-10-425-115-282940	Sequence 282940,	323	31	64.6	381	4	US-10-425-115-201452	Sequence 201452,
251	31	64.6	105	4	US-10-074-978A-303	Sequence 303, App	324	31	64.6	384	4	US-10-437-963-136287	Sequence 132067, Ap
252	31	64.6	123	4	US-10-424-599-252625	Sequence 252625,	325	31	64.6	395	4	US-10-374-780A-1270	Sequence 12707, Ap
253	31	64.6	124	4	US-10-437-963-169108	Sequence 169108,	326	31	64.6	395	4	US-10-412-699B-1423	Sequence 14233, Ap
254	31	64.6	128	4	US-10-408-765A-457	Sequence 457, App	327	31	64.6	399	3	US-09-930-512-73	Sequence 57852, A
255	31	64.6	128	4	US-10-425-115-322550	Sequence 322550,	328	31	64.6	399	4	US-10-225-066A-898	Sequence 898, App
256	31	64.6	140	4	US-10-767-701-59688	Sequence 59688, A	329	31	64.6	399	4	US-10-374-780A-194	Sequence 194, App
257	31	64.6	142	4	US-10-425-115-248572	Sequence 248572,	330	31	64.6	418	5	US-10-739-930-8777	Sequence 8777, Ap
258	31	64.6	149	4	US-10-767-701-39084	Sequence 39084, A	331	31	64.6	418	5	US-10-437-963-120430	Sequence 120430,
259	31	64.6	156	4	US-10-282-122A-61015	Sequence 61015, A	332	31	64.6	432	4	US-09-738-849-14	Sequence 14, App1
260	31	64.6	165	4	US-10-369-493-13339	Sequence 133239, A	333	31	64.6	436	3	US-09-738-849-14	Sequence 14, App1
261	31	64.6	175	3	US-09-815-242-11267	Sequence 11267, A	334	31	64.6	436	3	US-09-574-819-14	Sequence 14, App1
262	31	64.6	175	4	US-10-282-122A-58572	Sequence 58572, A	335	31	64.6	436	3	US-09-930-512-72	Sequence 72, App1
263	31	64.6	182	5	US-10-510-812-56	Sequence 56, App1	336	31	64.6	436	4	US-10-379-830-14	Sequence 14, App1
264	31	64.6	194	4	US-10-767-701-57863	Sequence 57863, A	337	31	64.6	436	4	US-10-164-279-57	Sequence 57, App1
265	31	64.6	195	4	US-10-425-115-285458	Sequence 285458,	338	31	64.6	436	4	US-10-851-438-85	Sequence 85, App1
266	31	64.6	204	4	US-10-424-599-257242	Sequence 257242,	339	31	64.6	436	4	US-10-851-438-85	Sequence 85, App1
267	31	64.6	207	4	US-10-282-122A-60525	Sequence 60525, A	340	31	64.6	455	3	US-09-825-751A-20	Sequence 20, App1
268	31	64.6	210	4	US-10-437-963-159669	Sequence 159669,	341	31	64.6	455	3	US-09-930-512-16	Sequence 16, App1
269	31	64.6	214	4	US-10-424-599-219097	Sequence 219097,	342	31	64.6	455	3	US-10-297-639-6	Sequence 6, App1
270	31	64.6	227	4	US-10-080-334-208	Sequence 208, App	343	31	64.6	455	4	US-10-851-438-20	Sequence 20, App1
271	31	64.6	233	6	US-11-097-143-18378	Sequence 18378, A	344	31	64.6	475	4	US-10-225-066A-1064	Sequence 1064, Ap
272	31	64.6	244	4	US-10-424-599-173208	Sequence 173208,	345	31	64.6	479	4	US-10-374-780A-2838	Sequence 2838, Ap
273	31	64.6	244	4	US-10-425-115-331197	Sequence 331197,	346	31	64.6	479	4	US-10-225-066A-1064	Sequence 1064, Ap
274	31	64.6	254	4	US-10-437-963-159665	Sequence 159665,	347	31	64.6	495	5	US-10-424-599-255123	Sequence 255123,
275	31	64.6	256	4	US-10-778-173-114	Sequence 114, App	348	31	64.6	485	4	US-10-437-963-201778	Sequence 201778,
276	31	64.6	256	4	US-10-378-536-20	Sequence 20, App1	349	31	64.6	485	4	US-10-437-963-159885	Sequence 159885,
277	31	64.6	256	4	US-10-302-267-172	Sequence 172, App1	350	31	64.6	506	4	US-10-437-963-159671	Sequence 159671,
278	31	64.6	262	5	US-10-739-930-10590	Sequence 10590, A	351	31	64.6	506	4	US-10-437-963-159671	Sequence 159671,
279	31	64.6	266	5	US-10-424-599-145877	Sequence 145877,	352	31	64.6	550	4	US-11-097-143-330	Sequence 330, App
280	31	64.6	267	5	US-10-739-930-10588	Sequence 10588, A	353	31	64.6	550	4	US-10-437-963-157813	Sequence 157813,
281	31	64.6	273	4	US-10-425-114-53924	Sequence 53924, A	354	31	64.6	554	6	US-10-424-599-156342	Sequence 156342,
282	31	64.6	276	4	US-10-437-963-113782	Sequence 113782,	355	31	64.6	559	4	US-10-437-963-108142	Sequence 108142,
283	31	64.6	276	4	US-10-37-963-170319	Sequence 170319,	356	31	64.6	570	4	US-10-437-963-11651	Sequence 11651,
284	31	64.6	279	4	US-10-424-599-246390	Sequence 246390,	357	31	64.6	614	4	US-10-840-51-188	Sequence 188, App
285	31	64.6	281	4	US-10-425-114-37671	Sequence 37671, A	358	31	64.6	626	5	US-10-437-963-159673	Sequence 159673,
286	31	64.6	281	4	US-10-425-115-214054	Sequence 214054,	359	31	64.6	628	4	US-10-437-963-116150	Sequence 116150,
287	31	64.6	286	4	US-10-424-599-175451	Sequence 175451,	360	31	64.6	648	4	US-10-437-963-171954	Sequence 171954,
288	31	64.6	287	4	US-10-425-115-37359	Sequence 37359,	361	31	64.6	656	4	US-10-437-963-171954	Sequence 171954,
289	31	64.6	287	5	US-10-501-282-3440	Sequence 3440, Ap	362	31	64.6	689	4	US-10-425-115-15098	Sequence 15098,
290	31	64.6	301	4	US-10-437-963-118399	Sequence 118399,	363	31	64.6	728	4	US-10-425-114-69233	Sequence 69233, A
291	31	64.6	304	4	US-10-389-566-835	Sequence 835, App	364	31	64.6	809	4	US-10-771-931-37	Sequence 37, App1
292	31	64.6	308	4	US-10-437-963-140928	Sequence 140928,	365	31	64.6	884	4	US-10-437-963-108154	Sequence 108154,
293	31	64.6	309	5	US-10-739-930-9439	Sequence 9439, Ap	366	31	64.6	896	4	US-10-425-113-230544	Sequence 230544,
294	31	64.6	310	5	US-10-500-361A-133	Sequence 133, App	367	31	64.6	973	6	US-11-097-143-2889	Sequence 2889, Ap
295	31	64.6	311	4	US-10-424-599-281637	Sequence 281637,	368	31	64.6	1049	4	US-10-425-114-71450	Sequence 71450, A
296	31	64.6	313	4	US-10-282-122A-48273	Sequence 48273, A	369	31	64.6	1113	4	US-10-389-566-657	Sequence 657, App
297	31	64.6	319	4	US-10-425-114-69533	Sequence 69533, A	370	31	64.6	1140	4	US-10-437-963-171644	Sequence 171644,
298	31	64.6	321	4	US-10-335-977-9254	Sequence 9254, Ap	371	31	64.6	1177	4	US-10-437-963-108155	Sequence 108155,
299	31	64.6	321	4	US-10-335-977-9254	Sequence 9254, Ap	372	31	64.6	1209	4	US-10-437-963-171648	Sequence 171648,
300	31	64.6	326	4	US-10-424-599-269951	Sequence 269951,	373	31	64.6	1249	4	US-10-437-963-108149	Sequence 108149,
301	31	64.6	329	4	US-10-424-599-269951	Sequence 269951,	374	31	64.6	1274	4	US-10-437-963-108146	Sequence 108146,
302	31	64.6	329	4	US-10-424-599-269951	Sequence 269951,	375	31	64.6	1400	5	US-11-097-143-5457	Sequence 5457, Ap
303	31	64.6	331	4	US-10-437-963-198255	Sequence 198255,	376	31	64.6	1524	4	US-10-437-963-108145	Sequence 108145,
304	31	64.6	334	4	US-10-235-066A-132	Sequence 132, App	377	31	64.6	1562	4	US-10-097-534-13	Sequence 534, App1
305	31	64.6	334	4	US-10-374-780A-2186	Sequence 2186, Ap	378	31	64.6	1662	5	US-10-450-763-57852	Sequence 57852, A
306	31	64.6	334	4	US-10-412-699B-1924	Sequence 1924, Ap	379	31	64.6	1603	4	US-10-437-963-171684	Sequence 171684,
307	31	64.6	334	5	US-10-225-066A-132	Sequence 132, App	380	31	64.6	1603	4	US-10-437-963-171684	Sequence 171684,
308	31	64.6	338	4	US-10-425-114-37036	Sequence 37036, A	381	31	64.6	1642	4	US-10-450-763-200895	Sequence 200895,
309	31	64.6	345	4	US-10-412-699B-151	Sequence 514, App	382	31	64.6	1702	5	US-10-437-963-171684	Sequence 171684,
310	31	64.6	345	4	US-10-437-963-159668	Sequence 159668,	383	31	64.6	1708	4	US-10-437-963-171686	Sequence 171686,
311	31	64.6	351	5	US-10-450-763-54703	Sequence 54703, A	384	31	64.6	1837	4	US-10-437-963-200897	Sequence 200897,
312	31	64.6	354	4	US-10-156-761-8704	Sequence 8704, Ap	385	31	64.6	2725	4	US-10-295-027-928	Sequence 928, App
313	31	64.6	356	4	US-10-425-115-303566	Sequence 303566,	386	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1
314	31	64.6	357	4	US-10-424-599-153968	Sequence 153968,	387	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1
315	31	64.6	357	4	US-10-424-599-153969	Sequence 153969,	388	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1
316	31	64.6	358	4	US-10-412-699B-1892	Sequence 1892, Ap	389	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1
317	31	64.6	361	4	US-10-425-114-66370	Sequence 66370, A	390	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1
318	31	64.6	364	4	US-10-412-699B-634	Sequence 634, App	391	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1
319	31	64.6	366	4	US-10-437-963-138278	Sequence 138278,	392	31	64.6	2725	4	US-10-029-020-52	Sequence 52, App1

393	31	64.6	2725	4	US-10-408-765A-1687	Sequence 1687, Ap	466	30	62.5	337	4	US-10-767-701-4413	Sequence 44123, A
394	31	64.6	2725	5	US-10-723-860-4102	Sequence 4102, Ap	467	30	62.5	341	4	US-10-435-115-26539	Sequence 26639, A
395	30.5	63.5	2725	5	US-10-425-115-255849	Sequence 255849, A	468	30	62.5	345	4	US-10-437-963-188472	Sequence 188472, A
396	30	62.5	3	5	US-10-482-284A-209	Sequence 209, App	469	30	62.5	347	4	US-10-437-963-162487	Sequence 162487, A
397	30	62.5	29	4	US-10-767-701-56356	Sequence 56356, A	470	30	62.5	363	4	US-10-425-114-59344	Sequence 69344, A
398	30	62.5	43	3	US-09-205-658-77	Sequence 77, App1	471	30	62.5	365	4	US-10-264-217-2790	Sequence 2790, App
399	30	62.5	43	3	US-09-844-353A-77	Sequence 77, App1	472	30	62.5	369	4	US-10-437-963-108123	Sequence 108123, A
400	30	62.5	43	3	US-09-963-693-77	Sequence 77, App1	473	30	62.5	369	5	US-10-450-763-42593	Sequence 42593, A
401	30	62.5	50	4	US-10-424-599-209281	Sequence 209281, App	474	30	62.5	388	6	US-11-097-143-1560	Sequence 1560, Ap
402	30	62.5	72	4	US-10-424-599-216826	Sequence 216826, App	475	30	62.5	393	5	US-10-739-930-10911	Sequence 10911, A
403	30	62.5	72	4	US-10-425-115-310860	Sequence 310860, App	476	30	62.5	413	4	US-10-425-115-546970	Sequence 246970, A
404	30	62.5	93	4	US-10-425-115-217214	Sequence 217214, App	477	30	62.5	417	5	US-10-756-149-5183	Sequence 5183, Ap
405	30	62.5	93	4	US-10-425-115-349333	Sequence 349333, App	478	30	62.5	423	5	US-10-450-763-17210	Sequence 47210, A
406	30	62.5	96	4	US-10-425-115-321599	Sequence 321599, App	479	30	62.5	426	4	US-10-408-765A-338	Sequence 338, App
407	30	62.5	97	4	US-10-767-701-50375	Sequence 50375, A	480	30	62.5	426	4	US-10-408-765A-339	Sequence 339, App
408	30	62.5	100	4	US-10-425-115-216814	Sequence 216814, App	481	30	62.5	441	4	US-10-408-765A-791	Sequence 791, App
409	30	62.5	101	4	US-10-437-963-144006	Sequence 144006, App	482	30	62.5	456	3	US-09-486-734A-10	Sequence 74, App1
410	30	62.5	110	4	US-10-425-115-261824	Sequence 261824, App	483	30	62.5	457	4	US-10-114-270-74	Sequence 108123, A
411	30	62.5	110	4	US-10-425-115-361735	Sequence 361735, App	484	30	62.5	463	4	US-10-408-765A-1170	Sequence 1170, Ap
412	30	62.5	112	4	US-10-425-115-323306	Sequence 323306, App	485	30	62.5	466	4	US-10-103-313-198	Sequence 398, App
413	30	62.5	112	4	US-10-425-115-323312	Sequence 323312, App	486	30	62.5	490	4	US-10-437-963-140593	Sequence 140593, App
414	30	62.5	113	4	US-10-437-963-199677	Sequence 199677, App	487	30	62.5	502	5	US-10-450-763-38101	Sequence 38101, A
415	30	62.5	115	5	US-10-472-928-2638	Sequence 2638, Ap	488	30	62.5	508	4	US-10-369-022-54	Sequence 54, App1
416	30	62.5	118	4	US-10-424-599-248894	Sequence 248894, App	489	30	62.5	511	5	US-10-660-811A-160	Sequence 160, App
417	30	62.5	118	4	US-10-425-114-49356	Sequence 49356, A	490	30	62.5	515	3	US-09-815-242-12936	Sequence 12926, A
418	30	62.5	124	4	US-10-767-701-33575	Sequence 33575, A	491	30	62.5	525	3	US-10-282-122A-44129	Sequence 44129, A
419	30	62.5	127	4	US-10-425-115-201120	Sequence 201120, App	492	30	62.5	525	3	US-09-922-011-2	Sequence 2, App1
420	30	62.5	128	4	US-10-425-115-290988	Sequence 290988, App	493	30	62.5	536	3	US-10-282-122A-68213	Sequence 68213, A
421	30	62.5	139	3	US-09-828-523A-24	Sequence 24, App1	494	30	62.5	537	4	US-10-282-122A-57941	Sequence 57941, A
422	30	62.5	139	3	US-09-966-521-20	Sequence 20, App1	495	30	62.5	541	4	US-10-437-963-151826	Sequence 151826, A
423	30	62.5	139	3	US-10-429-094-20	Sequence 20, App1	496	30	62.5	552	4	US-10-369-493-18749	Sequence 18749, A
424	30	62.5	148	3	US-09-828-523A-94	Sequence 94, App1	497	30	62.5	553	4	US-10-437-963-165809	Sequence 165809, A
425	30	62.5	148	3	US-09-966-521-86	Sequence 86, App1	498	30	62.5	568	5	US-10-739-930-6647	Sequence 6647, Ap
426	30	62.5	148	4	US-10-429-094-86	Sequence 86, App1	499	30	62.5	576	4	US-10-282-122A-68213	Sequence 68213, A
427	30	62.5	148	4	US-10-425-115-323307	Sequence 323307, App	500	30	62.5	604	4	US-10-369-493-1855	Sequence 1855, Ap
428	30	62.5	155	4	US-10-425-115-253458	Sequence 253458, App	501	30	62.5	635	4	US-10-425-115-337707	Sequence 337707, A
429	30	62.5	159	4	US-10-369-493-16791	Sequence 16791, A	502	30	62.5	635	4	US-10-437-963-137698	Sequence 137698, A
430	30	62.5	160	4	US-10-425-115-184732	Sequence 184732, App	503	30	62.5	674	3	US-09-911-888-2	Sequence 2, App1
431	30	62.5	162	3	US-09-747-155-333	Sequence 333, App	504	30	62.5	684	3	US-09-911-927-72	Sequence 72, App1
432	30	62.5	164	5	US-10-450-763-51905	Sequence 51905, A	505	30	62.5	721	4	US-10-437-963-122118	Sequence 122118, A
433	30	62.5	166	4	US-10-425-115-184731	Sequence 184731, App	506	30	62.5	743	5	US-10-789-247-8	Sequence 8, App1
434	30	62.5	168	4	US-10-264-237-1540	Sequence 1540, Ap	507	30	62.5	799	4	US-10-437-963-162942	Sequence 162942, A
435	30	62.5	172	5	US-10-450-763-30667	Sequence 30667, A	508	30	62.5	799	4	US-10-425-115-337720	Sequence 337720, A
436	30	62.5	184	5	US-10-437-963-198611	Sequence 198611, App	509	30	62.5	832	4	US-10-282-122A-65071	Sequence 65071, A
437	30	62.5	184	5	US-10-947-979-52	Sequence 52, App1	510	30	62.5	852	4	US-10-282-122A-65071	Sequence 65901, A
438	30	62.5	197	4	US-10-767-701-51471	Sequence 51471, A	511	30	62.5	852	4	US-10-282-122A-65071	Sequence 128862, A
439	30	62.5	211	4	US-10-425-114-42338	Sequence 42338, A	512	30	62.5	885	4	US-10-424-599-218862	Sequence 218862, A
440	30	62.5	212	4	US-10-425-115-184735	Sequence 184735, App	513	30	62.5	895	6	US-11-097-143-17643	Sequence 17643, A
441	30	62.5	217	4	US-10-334-143-64	Sequence 64, App1	514	30	62.5	905	4	US-10-425-115-198750	Sequence 198750, A
442	30	62.5	217	4	US-10-474-776-270	Sequence 270, App	515	30	62.5	915	5	US-10-741-849-7128	Sequence 7128, Ap
443	30	62.5	218	4	US-10-437-963-116073	Sequence 116073, App	516	30	62.5	961	4	US-10-437-963-190153	Sequence 190153, A
444	30	62.5	220	4	US-10-425-115-289500	Sequence 289500, App	517	30	62.5	966	5	US-10-732-923-12750	Sequence 12750, A
445	30	62.5	231	4	US-10-424-599-244897	Sequence 244897, App	518	30	62.5	1038	5	US-10-732-923-6694	Sequence 6694, Ap
446	30	62.5	238	4	US-10-314-657-34	Sequence 34, App1	519	30	62.5	1160	4	US-10-437-963-301547	Sequence 301547, A
447	30	62.5	238	4	US-10-425-115-262183	Sequence 262183, App	520	30	62.5	1179	4	US-10-425-115-337709	Sequence 337709, A
448	30	62.5	249	5	US-10-473-193-34	Sequence 34, App1	521	30	62.5	1253	4	US-10-437-963-142083	Sequence 142083, A
449	30	62.5	249	4	US-10-425-115-365694	Sequence 365694, App	522	30	62.5	1327	4	US-10-437-963-189202	Sequence 189202, A
450	30	62.5	262	4	US-10-369-493-23373	Sequence 23373, A	523	30	62.5	1335	4	US-10-369-493-11136	Sequence 11136, A
451	30	62.5	265	4	US-10-282-122A-46873	Sequence 46873, A	524	30	62.5	1371	4	US-10-437-963-128341	Sequence 128341, A
452	30	62.5	268	4	US-10-369-493-22266	Sequence 22266, App	525	30	62.5	1419	6	US-11-097-143-4416	Sequence 4416, Ap
453	30	62.5	269	4	US-10-282-122A-78503	Sequence 78503, A	526	30	62.5	1420	4	US-10-369-493-11250	Sequence 11250, A
454	30	62.5	269	4	US-10-423-115-281894	Sequence 281894, App	527	30	62.5	1443	3	US-10-369-493-1119	Sequence 4119, Ap
455	30	62.5	270	5	US-10-732-923-10011	Sequence 10011, A	528	30	62.5	1464	3	US-09-924-070-15	Sequence 15, App1
456	30	62.5	271	5	US-10-450-763-60374	Sequence 60374, A	529	30	62.5	1464	3	US-10-222-727-15	Sequence 15, App1
457	30	62.5	280	4	US-10-264-049-2886	Sequence 2886, Ap	530	30	62.5	1576	5	US-10-732-923-19033	Sequence 19033, A
458	30	62.5	284	4	US-10-296-115-944	Sequence 944, App	531	30	62.5	1661	4	US-10-425-115-337705	Sequence 337705, A
459	30	62.5	285	4	US-10-425-115-281895	Sequence 281895, App	532	30	62.5	2023	6	US-11-097-143-17253	Sequence 17253, A
460	30	62.5	285	4	US-10-425-115-361741	Sequence 361741, App	533	30	62.5	2221	5	US-10-732-923-19032	Sequence 19032, A
461	30	62.5	302	4	US-10-425-114-71844	Sequence 71844, A	534	30	62.5	2273	6	US-11-097-143-12450	Sequence 12450, A
462	30	62.5	310	4	US-10-767-701-44631	Sequence 44631, A	535	30	62.5	2291	6	US-11-097-143-12450	Sequence 12450, A
463	30	62.5	318	5	US-10-732-923-10010	Sequence 10010, A	536	30	62.5	3210	4	US-10-425-115-365697	Sequence 365697, A
464	30	62.5	320	4	US-10-425-114-57438	Sequence 57438, A	537	30	62.5	3210	4	US-10-425-115-365699	Sequence 365699, A
465	30	62.5	337	4	US-10-425-114-50845	Sequence 50845, A	538	30	62.5	4961	4	US-10-114-153-64	Sequence 64, App1

539	-29	60.4	9	3	US-09-891-823-45	Sequence 45, Appl	612	29	60.4	191	3	US-09-734-017A-62	Sequence 62, Appl
540	-29	60.4	9	4	US-10-365-908-45	Sequence 45, Appl	613	29	60.4	191	4	US-10-224-880C-24	Sequence 24, Appl
541	-29	60.4	5	5	US-10-871-138-45	Sequence 45, Appl	614	29	60.4	192	4	US-10-260A-4595	Sequence 4595, Ap
542	-29	60.4	10	3	US-09-891-823-35	Sequence 35, Appl	615	29	60.4	193	5	US-10-732-923-21795	Sequence 21795, A
543	-29	60.4	10	4	US-10-365-908-35	Sequence 35, Appl	616	29	60.4	197	4	US-10-425-115-281890	Sequence 281890, A
544	-29	60.4	10	5	US-10-871-138-35	Sequence 35, Appl	617	29	60.4	198	4	US-10-250-613-8	Sequence 8, Appl1
545	-29	60.4	18	5	US-10-792-582-42	Sequence 42, Appl	618	29	60.4	199	3	US-09-764-868-663	Sequence 663, App
546	-29	60.4	29	4	US-10-424-599-278624	Sequence 278624, Sequence 214, App	619	29	60.4	199	5	US-10-719-993-696	Sequence 696, App
547	-29	60.4	37	4	US-10-082-830-214	Sequence 214, App	620	29	60.4	202	4	US-10-425-115-323461	Sequence 323461, Sequence 12, Appl1
548	-29	60.4	37	4	US-10-424-599-146134	Sequence 146134, Sequence 176579, Sequence 150719, Sequence 1588, Ap	621	29	60.4	204	4	US-10-473-115-14	Sequence 9243, App
549	-29	60.4	40	4	US-10-424-599-150719	Sequence 150719, Sequence 4969, Ap	622	29	60.4	206	5	US-10-156-761-9243	Sequence 9243, Ap
550	-29	60.4	42	4	US-10-424-599-150719	Sequence 1588, Ap	623	29	60.4	207	5	US-10-733-993-4407	Sequence 4407, Ap
551	-29	60.4	44	3	US-09-925-300-1588	Sequence 4969, Ap	624	29	60.4	208	4	US-10-767-701-12381	Sequence 12381, A
552	-29	60.4	44	4	US-10-106-698-4969	Sequence 273029, Sequence 282524, Sequence 260719, Sequence 260805, Sequence 234296, Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	625	29	60.4	210	3	US-09-815-242-13122	Sequence 13122, A
553	-29	60.4	46	4	US-10-425-115-273029	Sequence 282524, Sequence 260719, Sequence 260805, Sequence 234296, Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	626	29	60.4	212	3	US-09-815-242-13122	Sequence 13122, A
554	-29	60.4	46	4	US-10-425-115-282524	Sequence 282524, Sequence 260719, Sequence 260805, Sequence 234296, Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	627	29	60.4	212	3	US-09-815-242-13122	Sequence 13122, A
555	-29	60.4	48	4	US-10-425-115-260719	Sequence 260719, Sequence 260805, Sequence 234296, Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	628	29	60.4	218	4	US-10-425-115-342037	Sequence 342037, Sequence 300, App
556	-29	60.4	48	4	US-10-425-115-260805	Sequence 260805, Sequence 234296, Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	629	29	60.4	219	4	US-10-103-313-100	Sequence 37903, A
557	-29	60.4	50	4	US-10-425-115-234296	Sequence 234296, Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	630	29	60.4	219	4	US-10-425-114-49256	Sequence 49256, A
558	-29	60.4	55	4	US-10-425-115-260579	Sequence 260579, Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	631	29	60.4	219	4	US-10-425-114-49256	Sequence 49256, A
559	-29	60.4	55	4	US-10-425-115-226100	Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	632	29	60.4	219	4	US-10-425-115-253382	Sequence 253382, Sequence 365773, Sequence 2973, Ap
560	-29	60.4	59	4	US-10-425-115-226100	Sequence 226100, Sequence 237615, Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	633	29	60.4	236	4	US-10-108-260A-2973	Sequence 2973, Ap
561	-29	60.4	60	4	US-10-425-115-207771	Sequence 207771, Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	634	29	60.4	240	4	US-10-437-963-179979	Sequence 179979, Sequence 40085, A
562	-29	60.4	61	4	US-10-424-599-175419	Sequence 175419, Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	635	29	60.4	241	4	US-10-437-963-179979	Sequence 179979, Sequence 40085, A
563	-29	60.4	61	4	US-10-424-599-238135	Sequence 238135, Sequence 235226, Sequence 192770, Sequence 760, App	636	29	60.4	252	4	US-10-369-493-1250921	Sequence 1250921, Sequence 195780, A
564	-29	60.4	61	4	US-10-425-115-325226	Sequence 325226, Sequence 192770, Sequence 760, App	637	29	60.4	252	4	US-10-369-493-1250921	Sequence 1250921, Sequence 195780, A
565	-29	60.4	64	4	US-10-424-599-192770	Sequence 192770, Sequence 760, App	638	29	60.4	253	4	US-10-437-963-179331	Sequence 179331, A
566	-29	60.4	66	3	US-09-864-408A-760	Sequence 760, App	639	29	60.4	258	4	US-10-156-761-123333	Sequence 123333, A
567	-29	60.4	68	5	US-10-872-874-197	Sequence 197, App	640	29	60.4	260	4	US-10-156-761-123333	Sequence 123333, A
568	-29	60.4	69	4	US-10-424-599-217016	Sequence 217016, Sequence 279101, Sequence 209027, Sequence 235601, Sequence 303738, Sequence 182, App	641	29	60.4	260	4	US-10-224-880C-10	Sequence 5813, Ap
569	-29	60.4	69	4	US-10-424-599-217016	Sequence 279101, Sequence 209027, Sequence 235601, Sequence 303738, Sequence 182, App	642	29	60.4	260	4	US-09-815-242-5813	Sequence 4462, A
570	-29	60.4	74	4	US-10-424-599-279101	Sequence 279101, Sequence 209027, Sequence 235601, Sequence 303738, Sequence 182, App	643	29	60.4	272	4	US-10-282-122A-44462	Sequence 44666, A
571	-29	60.4	76	4	US-10-424-599-209027	Sequence 209027, Sequence 235601, Sequence 303738, Sequence 182, App	644	29	60.4	274	4	US-10-424-599-208996	Sequence 208996, A
572	-29	60.4	76	4	US-10-424-599-209027	Sequence 209027, Sequence 235601, Sequence 303738, Sequence 182, App	645	29	60.4	276	4	US-10-767-701-44686	Sequence 44686, A
573	-29	60.4	78	6	US-11-021-949-182	Sequence 182, App	646	29	60.4	280	3	US-09-960-631A-5	Sequence 5, Appl1
574	-29	60.4	78	6	US-11-021-928A-79	Sequence 79, Appl	647	29	60.4	284	4	US-10-369-493-6191	Sequence 6191, Ap
575	-29	60.4	79	5	US-10-330-590-79	Sequence 79, Appl	648	29	60.4	284	4	US-10-369-493-6191	Sequence 6192, Ap
576	-29	60.4	79	5	US-10-789-102-178	Sequence 178, App	649	29	60.4	285	3	US-09-769-787-31	Sequence 31, Appl
577	-29	60.4	80	4	US-10-437-963-135282	Sequence 135282, Sequence 281, App	650	29	60.4	285	4	US-10-322-281-352	Sequence 562, App
578	-29	60.4	80	5	US-10-437-963-135282	Sequence 281, App	651	29	60.4	285	4	US-10-472-928-1576	Sequence 1576, Ap
579	-29	60.4	82	4	US-10-437-963-164212	Sequence 164212, Sequence 260490, Sequence 342084, Sequence 342084, Sequence 353662, Sequence 95, Appl1	652	29	60.4	293	4	US-10-184-648-54	Sequence 54, Appl
580	-29	60.4	84	4	US-10-424-599-260490	Sequence 260490, Sequence 342084, Sequence 353662, Sequence 95, Appl1	653	29	60.4	294	4	US-10-424-599-193310	Sequence 193310, Sequence 236029, Sequence 18, Appl
581	-29	60.4	86	4	US-10-425-115-342084	Sequence 342084, Sequence 353662, Sequence 95, Appl1	654	29	60.4	294	4	US-10-424-599-236029	Sequence 236029, Sequence 18, Appl
582	-29	60.4	90	4	US-10-630-590-95	Sequence 95, Appl1	655	29	60.4	297	5	US-10-794-493-18	Sequence 8482, Ap
583	-29	60.4	90	4	US-10-425-115-353662	Sequence 353662, Sequence 194, App	656	29	60.4	304	5	US-10-732-923-8482	Sequence 10, Appl
584	-29	60.4	90	5	US-10-789-102-194	Sequence 194, App	657	29	60.4	309	4	US-10-304-928-10	Sequence 10, Appl
585	-29	60.4	90	5	US-11-021-949-192	Sequence 89, Appl	658	29	60.4	313	4	US-10-425-115-323462	Sequence 323462, Sequence 17379, A
586	-29	60.4	90	6	US-11-021-928A-89	Sequence 89, Appl	659	29	60.4	319	6	US-11-097-143-17379	Sequence 17379, A
587	-29	60.4	91	3	US-09-864-761-48908	Sequence 48908, A	660	29	60.4	322	5	US-10-732-923-8478	Sequence 8478, Ap
588	-29	60.4	91	4	US-10-437-963-120355	Sequence 120355, Sequence 255059, Sequence 3644, Ap	661	29	60.4	322	5	US-11-097-143-13155	Sequence 13155, A
589	-29	60.4	94	4	US-10-437-963-120355	Sequence 120355, Sequence 196642, Sequence 200946, Sequence 255059, Sequence 3644, Ap	662	29	60.4	326	6	US-09-862-027-10	Sequence 10, Appl
590	-29	60.4	95	4	US-10-425-115-196642	Sequence 196642, Sequence 200946, Sequence 255059, Sequence 3644, Ap	663	29	60.4	326	6	US-10-424-599-259577	Sequence 259577, Sequence 10, Appl1
591	-29	60.4	98	4	US-10-424-599-200946	Sequence 200946, Sequence 255059, Sequence 3644, Ap	664	29	60.4	326	6	US-10-989-228-10	Sequence 55207, A
592	-29	60.4	103	4	US-10-425-115-255059	Sequence 255059, Sequence 3644, Ap	665	29	60.4	326	5	US-10-450-761-55207	Sequence 40665, A
593	-29	60.4	109	5	US-10-501-282-3644	Sequence 3644, Ap	666	29	60.4	326	5	US-10-450-761-55207	Sequence 40665, A
594	-29	60.4	116	4	US-10-437-963-172752	Sequence 172752, Sequence 172857, A	667	29	60.4	332	5	US-10-289-762-664	Sequence 664, App
595	-29	60.4	127	4	US-10-767-701-42457	Sequence 42457, A	668	29	60.4	337	4	US-10-369-493-9046	Sequence 9046, Ap
596	-29	60.4	128	4	US-10-437-963-178063	Sequence 178063, Sequence 5039, Ap	669	29	60.4	340	4	US-10-425-115-334170	Sequence 334170, Sequence 261803, Sequence 962, App
597	-29	60.4	130	4	US-10-106-698-5039	Sequence 5039, Ap	670	29	60.4	340	4	US-10-424-599-261803	Sequence 261803, Sequence 962, App
598	-29	60.4	131	4	US-10-425-115-360713	Sequence 360713, Sequence 42, Appl	671	29	60.4	351	4	US-10-690-994-4	Sequence 962, App
599	-29	60.4	131	4	US-10-289-762-42	Sequence 42, Appl	672	29	60.4	367	4	US-10-389-565-962	Sequence 131910, Sequence 255962, Sequence 54775, A
600	-29	60.4	132	4	US-10-437-963-183725	Sequence 183725, Sequence 358186, Sequence 36963, A	673	29	60.4	368	4	US-10-437-963-131910	Sequence 131910, Sequence 54775, A
601	-29	60.4	145	4	US-10-425-115-358186	Sequence 358186, Sequence 36963, A	674	29	60.4	371	4	US-10-424-599-255962	Sequence 255962, Sequence 3178, Ap
602	-29	60.4	147	6	US-11-097-143-36963	Sequence 36963, A	675	29	60.4	391	4	US-10-282-122A-54735	Sequence 54735, A
603	-29	60.4	148	4	US-10-437-963-145921	Sequence 145921, Sequence 261795, Sequence 247216, Sequence 4384, Ap	676	29	60.4	393	4	US-10-320-797-3138	Sequence 3138, Ap
604	-29	60.4	150	4	US-10-424-599-261795	Sequence 261795, Sequence 247216, Sequence 4384, Ap	677	29	60.4	393	4	US-10-320-797-3138	Sequence 3138, Ap
605	-29	60.4	152	4	US-10-424-599-247216	Sequence 4384, Ap	678	29	60.4	394	4	US-10-282-122A-55289	Sequence 55289, A
606	-29	60.4	156	5	US-10-617-320-4384	Sequence 4384, Ap	679	29	60.4	395	4	US-10-437-963-146075	Sequence 146075, Sequence 2639, App
607	-29	60.4	161	4	US-10-425-115-340262	Sequence 340262, Sequence 259576, Sequence 203445, Sequence 8564, Ap	680	29	60.4	397	5	US-10-732-923-2215	Sequence 2215, Ap
608	-29	60.4	168	4	US-10-424-599-259576	Sequence 259576, Sequence 203445, Sequence 8564, Ap	681	29	60.4	397	5	US-10-732-923-2215	Sequence 2215, Ap
609	-29	60.4	177	4</									

685	29	60.4	407	4	US-10-425-115-350106	Sequence 350106,	758	29	60.4	462	4	US-10-176-493-298	Sequence 298, App
686	29	60.4	415	6	US-11-097-143-25542	Sequence 25542, A	759	29	60.4	462	4	US-10-176-756-298	Sequence 298, App
687	29	60.4	416	3	US-09-925-301-1748	Sequence 1046, Ap	760	29	60.4	462	4	US-10-176-911-298	Sequence 298, App
688	29	60.4	416	4	US-10-264-049-2786	Sequence 2788, Ap	761	29	60.4	462	4	US-10-176-919-298	Sequence 298, App
689	29	60.4	417	6	US-11-097-143-38490	Sequence 38490, A	762	29	60.4	462	4	US-10-176-925-298	Sequence 298, App
690	29	60.4	418	4	US-10-060-065-2	Sequence 2, Appl1	763	29	60.4	462	4	US-10-176-928-298	Sequence 298, App
691	29	60.4	418	4	US-10-437-963-190410	Sequence 190410,	764	29	60.4	462	4	US-10-179-510-298	Sequence 298, App
692	29	60.4	418	4	US-10-618-941-112	Sequence 112, App	765	29	60.4	462	4	US-10-180-543-298	Sequence 298, App
693	29	60.4	418	5	US-10-725-323-99	Sequence 99, Appl	766	29	60.4	462	4	US-10-180-544-298	Sequence 298, App
694	29	60.4	418	5	US-10-725-121-99	Sequence 99, Appl	767	29	60.4	462	4	US-10-180-546-298	Sequence 298, App
695	29	60.4	434	4	US-10-027-806-14	Sequence 14, Appl	768	29	60.4	462	4	US-10-180-547-298	Sequence 298, App
696	29	60.4	434	4	US-10-027-806-46	Sequence 46, Appl	769	29	60.4	462	4	US-10-180-549-298	Sequence 298, App
697	29	60.4	434	4	US-10-034-623-14	Sequence 46, Appl	770	29	60.4	462	4	US-10-180-555-298	Sequence 298, App
698	29	60.4	434	4	US-10-034-623-46	Sequence 46, Appl	771	29	60.4	462	4	US-10-180-559-298	Sequence 298, App
699	29	60.4	434	4	US-10-027-801-14	Sequence 14, Appl	772	29	60.4	462	4	US-10-181-000-298	Sequence 298, App
700	29	60.4	434	4	US-10-027-801-46	Sequence 46, Appl	773	29	60.4	462	4	US-10-183-010-298	Sequence 298, App
701	29	60.4	434	4	US-10-029-120-14	Sequence 14, Appl	774	29	60.4	462	4	US-10-183-012-298	Sequence 298, App
702	29	60.4	434	4	US-10-029-120-46	Sequence 46, Appl	775	29	60.4	462	4	US-10-184-614-298	Sequence 298, App
703	29	60.4	445	5	US-10-450-763-48222	Sequence 48222, A	776	29	60.4	462	4	US-10-184-623-298	Sequence 298, App
704	29	60.4	446	4	US-10-617-038-8	Sequence 8, Appl1	777	29	60.4	462	4	US-10-184-635-298	Sequence 298, App
705	29	60.4	449	4	US-09-742-582-21	Sequence 21, Appl	778	29	60.4	462	4	US-10-184-637-298	Sequence 298, App
706	29	60.4	449	3	US-09-742-580-21	Sequence 21, Appl	779	29	60.4	462	4	US-10-184-646-298	Sequence 298, App
707	29	60.4	449	3	US-09-742-581-21	Sequence 21, Appl	780	29	60.4	462	4	US-10-184-647-298	Sequence 298, App
708	29	60.4	451	4	US-10-437-963-122067	Sequence 122067,	781	29	60.4	462	4	US-10-184-652-298	Sequence 298, App
709	29	60.4	459	5	US-10-501-282-4768	Sequence 4768, Ap	782	29	60.4	462	4	US-10-187-594-298	Sequence 298, App
710	29	60.4	460	5	US-10-450-763-36190	Sequence 36190, A	783	29	60.4	462	4	US-10-187-596-298	Sequence 298, App
711	29	60.4	461	4	US-10-369-493-5084	Sequence 5084, Ap	784	29	60.4	462	4	US-10-187-745-298	Sequence 298, App
712	29	60.4	462	3	US-09-946-374-212	Sequence 212, App	785	29	60.4	462	4	US-10-187-885-298	Sequence 298, App
713	29	60.4	462	4	US-10-052-586-298	Sequence 298, App	786	29	60.4	462	4	US-10-187-886-298	Sequence 298, App
714	29	60.4	462	4	US-10-174-590-298	Sequence 298, App	787	29	60.4	462	4	US-10-159-464-298	Sequence 298, App
715	29	60.4	462	4	US-10-176-758-298	Sequence 298, App	788	29	60.4	462	4	US-10-196-756-298	Sequence 298, App
716	29	60.4	462	4	US-10-175-737-298	Sequence 298, App	789	29	60.4	462	4	US-10-176-751-298	Sequence 298, App
717	29	60.4	462	4	US-10-174-581-298	Sequence 298, App	790	29	60.4	462	4	US-10-176-760-298	Sequence 298, App
718	29	60.4	462	4	US-10-176-483-298	Sequence 298, App	791	29	60.4	462	4	US-10-176-900-298	Sequence 298, App
719	29	60.4	462	4	US-10-176-749-298	Sequence 298, App	792	29	60.4	462	4	US-10-180-541-298	Sequence 298, App
720	29	60.4	462	4	US-10-176-914-298	Sequence 298, App	793	29	60.4	462	4	US-10-180-542-298	Sequence 298, App
721	29	60.4	462	4	US-10-176-915-298	Sequence 298, App	794	29	60.4	462	4	US-10-180-548-298	Sequence 298, App
722	29	60.4	462	4	US-10-173-706-298	Sequence 298, App	795	29	60.4	462	4	US-10-180-551-298	Sequence 298, App
723	29	60.4	462	4	US-10-175-738-298	Sequence 298, App	796	29	60.4	462	4	US-10-180-998-298	Sequence 298, App
724	29	60.4	462	4	US-10-175-752-298	Sequence 298, App	797	29	60.4	462	4	US-10-180-999-298	Sequence 298, App
725	29	60.4	462	4	US-10-176-482-298	Sequence 298, App	798	29	60.4	462	4	US-10-183-013-298	Sequence 298, App
726	29	60.4	462	4	US-10-176-757-298	Sequence 298, App	799	29	60.4	462	4	US-10-184-612-298	Sequence 298, App
727	29	60.4	462	4	US-10-176-913-298	Sequence 298, App	800	29	60.4	462	4	US-10-184-616-298	Sequence 298, App
728	29	60.4	462	4	US-10-180-552-298	Sequence 298, App	801	29	60.4	462	4	US-10-184-617-298	Sequence 298, App
729	29	60.4	462	4	US-10-180-557-298	Sequence 298, App	802	29	60.4	462	4	US-10-184-622-298	Sequence 298, App
730	29	60.4	462	4	US-10-173-700-298	Sequence 298, App	803	29	60.4	462	4	US-10-184-628-298	Sequence 298, App
731	29	60.4	462	4	US-10-174-572-298	Sequence 298, App	804	29	60.4	462	4	US-10-184-629-298	Sequence 298, App
732	29	60.4	462	4	US-10-174-572-298	Sequence 298, App	805	29	60.4	462	4	US-10-184-630-298	Sequence 298, App
733	29	60.4	462	4	US-10-174-582-298	Sequence 298, App	806	29	60.4	462	4	US-10-184-631-298	Sequence 298, App
734	29	60.4	462	4	US-10-174-588-298	Sequence 298, App	807	29	60.4	462	4	US-10-184-632-298	Sequence 298, App
735	29	60.4	462	4	US-10-175-738-298	Sequence 298, App	808	29	60.4	462	4	US-10-184-636-298	Sequence 298, App
736	29	60.4	462	4	US-10-175-740-298	Sequence 298, App	809	29	60.4	462	4	US-10-184-640-298	Sequence 298, App
737	29	60.4	462	4	US-10-175-743-298	Sequence 298, App	810	29	60.4	462	4	US-10-184-650-298	Sequence 298, App
738	29	60.4	462	4	US-10-176-488-298	Sequence 298, App	811	29	60.4	462	4	US-10-184-651-298	Sequence 298, App
739	29	60.4	462	4	US-10-176-492-298	Sequence 298, App	812	29	60.4	462	4	US-10-187-588-298	Sequence 298, App
740	29	60.4	462	4	US-10-176-747-298	Sequence 298, App	813	29	60.4	462	4	US-10-187-597-298	Sequence 298, App
741	29	60.4	462	4	US-10-176-750-298	Sequence 298, App	814	29	60.4	462	4	US-10-187-598-298	Sequence 298, App
742	29	60.4	462	4	US-10-176-985-298	Sequence 298, App	815	29	60.4	462	4	US-10-187-600-298	Sequence 298, App
743	29	60.4	462	4	US-10-176-987-298	Sequence 298, App	816	29	60.4	462	4	US-10-187-601-298	Sequence 298, App
744	29	60.4	462	4	US-10-176-992-298	Sequence 298, App	817	29	60.4	462	4	US-10-187-602-298	Sequence 298, App
745	29	60.4	462	4	US-10-176-993-298	Sequence 298, App	818	29	60.4	462	4	US-10-187-603-298	Sequence 298, App
746	29	60.4	462	4	US-10-184-658-298	Sequence 298, App	819	29	60.4	462	4	US-10-187-741-298	Sequence 298, App
747	29	60.4	462	4	US-10-176-991-298	Sequence 298, App	820	29	60.4	462	4	US-10-187-743-298	Sequence 298, App
748	29	60.4	462	4	US-10-173-695-298	Sequence 298, App	821	29	60.4	462	4	US-10-187-746-298	Sequence 298, App
749	29	60.4	462	4	US-10-173-697-298	Sequence 298, App	822	29	60.4	462	4	US-10-187-747-298	Sequence 298, App
750	29	60.4	462	4	US-10-173-705-298	Sequence 298, App	823	29	60.4	462	4	US-10-187-751-298	Sequence 298, App
751	29	60.4	462	4	US-10-174-575-298	Sequence 298, App	824	29	60.4	462	4	US-10-187-753-298	Sequence 298, App
752	29	60.4	462	4	US-10-174-586-298	Sequence 298, App	825	29	60.4	462	4	US-10-187-754-298	Sequence 298, App
753	29	60.4	462	4	US-10-174-586-298	Sequence 298, App	826	29	60.4	462	4	US-10-187-757-298	Sequence 298, App
754	29	60.4	462	4	US-10-175-747-298	Sequence 298, App	827	29	60.4	462	4	US-10-187-884-298	Sequence 298, App
755	29	60.4	462	4	US-10-176-481-298	Sequence 298, App	828	29	60.4	462	4	US-10-188-767-298	Sequence 298, App
756	29	60.4	462	4	US-10-176-485-298	Sequence 298, App	829	29	60.4	462	4	US-10-188-769-298	Sequence 298, App
757	29	60.4	462	4	US-10-176-487-298	Sequence 298, App	830	29	60.4	462	4	US-10-188-770-298	Sequence 298, App

831	29	60.4	462.4	US-10-188-773-298	Sequence 298, App	904	29	60.4	462.4	US-10-198-768-298	Sequence 298, App
832	29	60.4	462.4	US-10-188-781-298	Sequence 298, App	905	29	60.4	462.4	US-10-198-769-298	Sequence 298, App
833	29	60.4	462.4	US-10-194-361-298	Sequence 298, App	906	29	60.4	462.4	US-10-199-305-298	Sequence 298, App
834	29	60.4	462.4	US-10-194-423-298	Sequence 298, App	907	29	60.4	462.4	US-10-199-306-298	Sequence 298, App
835	29	60.4	462.4	US-10-195-897-298	Sequence 298, App	908	29	60.4	462.4	US-10-199-310-298	Sequence 298, App
836	29	60.4	462.4	US-10-195-901-298	Sequence 298, App	909	29	60.4	462.4	US-10-199-311-298	Sequence 298, App
837	29	60.4	462.4	US-10-195-902-298	Sequence 298, App	910	29	60.4	462.4	US-10-199-314-298	Sequence 298, App
838	29	60.4	462.4	US-10-196-743-298	Sequence 298, App	911	29	60.4	462.4	US-10-199-317-298	Sequence 298, App
839	29	60.4	462.4	US-10-196-760-298	Sequence 298, App	912	29	60.4	462.4	US-10-199-665-298	Sequence 298, App
840	29	60.4	462.4	US-10-173-708-298	Sequence 298, App	913	29	60.4	462.4	US-10-199-666-298	Sequence 298, App
841	29	60.4	462.4	US-10-176-479-298	Sequence 298, App	914	29	60.4	462.4	US-10-201-534-298	Sequence 298, App
842	29	60.4	462.4	US-10-176-748-298	Sequence 298, App	915	29	60.4	462.4	US-10-201-770-298	Sequence 298, App
843	29	60.4	462.4	US-10-176-916-298	Sequence 298, App	916	29	60.4	462.4	US-10-202-936-298	Sequence 298, App
844	29	60.4	462.4	US-10-179-507-298	Sequence 298, App	917	29	60.4	462.4	US-10-201-856-298	Sequence 298, App
845	29	60.4	462.4	US-10-179-516-298	Sequence 298, App	918	29	60.4	462.4	US-10-202-469-298	Sequence 298, App
846	29	60.4	462.4	US-10-179-519-298	Sequence 298, App	919	29	60.4	462.4	US-10-202-470-298	Sequence 298, App
847	29	60.4	462.4	US-10-179-525-298	Sequence 298, App	920	29	60.4	462.4	US-10-202-476-298	Sequence 298, App
848	29	60.4	462.4	US-10-180-540-298	Sequence 298, App	921	29	60.4	462.4	US-10-202-934-298	Sequence 298, App
849	29	60.4	462.4	US-10-180-545-298	Sequence 298, App	922	29	60.4	462.4	US-10-202-935-298	Sequence 298, App
850	29	60.4	462.4	US-10-183-006-298	Sequence 298, App	923	29	60.4	462.4	US-10-202-936-298	Sequence 298, App
851	29	60.4	462.4	US-10-183-008-298	Sequence 298, App	924	29	60.4	462.4	US-10-202-939-298	Sequence 298, App
852	29	60.4	462.4	US-10-183-017-298	Sequence 298, App	925	29	60.4	462.4	US-10-205-504-298	Sequence 298, App
853	29	60.4	462.4	US-10-183-019-298	Sequence 298, App	926	29	60.4	462.4	US-10-205-509-298	Sequence 298, App
854	29	60.4	462.4	US-10-184-618-298	Sequence 298, App	927	29	60.4	462.4	US-10-205-895-298	Sequence 298, App
855	29	60.4	462.4	US-10-184-625-298	Sequence 298, App	928	29	60.4	462.4	US-10-205-899-298	Sequence 298, App
856	29	60.4	462.4	US-10-184-626-298	Sequence 298, App	929	29	60.4	462.4	US-10-205-900-298	Sequence 298, App
857	29	60.4	462.4	US-10-184-627-298	Sequence 298, App	930	29	60.4	462.4	US-10-205-909-298	Sequence 298, App
858	29	60.4	462.4	US-10-184-645-298	Sequence 298, App	931	29	60.4	462.4	US-10-195-890-298	Sequence 298, App
859	29	60.4	462.4	US-10-184-654-298	Sequence 298, App	932	29	60.4	462.4	US-10-186-818A-212	Sequence 298, App
860	29	60.4	462.4	US-10-184-655-298	Sequence 298, App	933	29	60.4	462.4	US-10-188-002-298	Sequence 298, App
861	29	60.4	462.4	US-10-188-774-298	Sequence 298, App	934	29	60.4	462.4	US-10-184-621-298	Sequence 298, App
862	29	60.4	462.4	US-10-188-775-298	Sequence 298, App	935	29	60.4	462.4	US-10-184-638-298	Sequence 298, App
863	29	60.4	462.4	US-10-196-745-298	Sequence 298, App	936	29	60.4	462.4	US-10-187-752-298	Sequence 298, App
864	29	60.4	462.4	US-10-196-762-298	Sequence 298, App	937	29	60.4	462.4	US-10-187-887-298	Sequence 298, App
865	29	60.4	462.4	US-10-197-506-298	Sequence 298, App	938	29	60.4	462.4	US-10-194-461-298	Sequence 298, App
866	29	60.4	462.4	US-10-197-506-298	Sequence 298, App	939	29	60.4	462.4	US-10-196-882-298	Sequence 298, App
867	29	60.4	462.4	US-10-197-506-298	Sequence 298, App	940	29	60.4	462.4	US-10-196-751-298	Sequence 298, App
868	29	60.4	462.4	US-10-195-894-298	Sequence 298, App	941	29	60.4	462.4	US-10-197-654-298	Sequence 298, App
869	29	60.4	462.4	US-10-195-894-298	Sequence 298, App	942	29	60.4	462.4	US-10-197-657-298	Sequence 298, App
870	29	60.4	462.4	US-10-176-484-298	Sequence 298, App	943	29	60.4	462.4	US-10-197-707-298	Sequence 298, App
871	29	60.4	462.4	US-10-176-753-298	Sequence 298, App	944	29	60.4	462.4	US-10-199-303-298	Sequence 298, App
872	29	60.4	462.4	US-10-176-917-298	Sequence 298, App	945	29	60.4	462.4	US-10-199-318-298	Sequence 298, App
873	29	60.4	462.4	US-10-179-506-298	Sequence 298, App	946	29	60.4	462.4	US-10-199-428-298	Sequence 298, App
874	29	60.4	462.4	US-10-179-513-298	Sequence 298, App	947	29	60.4	462.4	US-10-199-462-298	Sequence 298, App
875	29	60.4	462.4	US-10-179-514-298	Sequence 298, App	948	29	60.4	462.4	US-10-201-324-298	Sequence 298, App
876	29	60.4	462.4	US-10-179-522-298	Sequence 298, App	949	29	60.4	462.4	US-10-201-328-298	Sequence 298, App
877	29	60.4	462.4	US-10-180-556-298	Sequence 298, App	950	29	60.4	462.4	US-10-201-527-298	Sequence 298, App
878	29	60.4	462.4	US-10-180-560-298	Sequence 298, App	951	29	60.4	462.4	US-10-201-528-298	Sequence 298, App
879	29	60.4	462.4	US-10-183-015-298	Sequence 298, App	952	29	60.4	462.4	US-10-201-529-298	Sequence 298, App
880	29	60.4	462.4	US-10-184-615-298	Sequence 298, App	953	29	60.4	462.4	US-10-201-530-298	Sequence 298, App
881	29	60.4	462.4	US-10-184-620-298	Sequence 298, App	954	29	60.4	462.4	US-10-202-409-298	Sequence 298, App
882	29	60.4	462.4	US-10-184-623-298	Sequence 298, App	955	29	60.4	462.4	US-10-202-409-298	Sequence 298, App
883	29	60.4	462.4	US-10-184-656-298	Sequence 298, App	956	29	60.4	462.4	US-10-202-409-298	Sequence 298, App
884	29	60.4	462.4	US-10-192-010-298	Sequence 298, App	957	29	60.4	462.4	US-10-202-411-298	Sequence 298, App
885	29	60.4	462.4	US-10-205-908-298	Sequence 298, App	958	29	60.4	462.4	US-10-202-472-298	Sequence 298, App
886	29	60.4	462.4	US-10-184-619-298	Sequence 298, App	959	29	60.4	462.4	US-10-205-502-298	Sequence 298, App
887	29	60.4	462.4	US-10-187-559-298	Sequence 298, App	960	29	60.4	462.4	US-10-205-507-298	Sequence 298, App
888	29	60.4	462.4	US-10-187-750-298	Sequence 298, App	961	29	60.4	462.4	US-10-205-511-298	Sequence 298, App
889	29	60.4	462.4	US-10-188-780-298	Sequence 298, App	962	29	60.4	462.4	US-10-205-902-298	Sequence 298, App
890	29	60.4	462.4	US-10-192-015-298	Sequence 298, App	963	29	60.4	462.4	US-10-205-907-298	Sequence 298, App
891	29	60.4	462.4	US-10-194-394-298	Sequence 298, App	964	29	60.4	462.4	US-10-176-484-298	Sequence 298, App
892	29	60.4	462.4	US-10-194-425-298	Sequence 298, App	965	29	60.4	462.4	US-10-194-456-298	Sequence 298, App
893	29	60.4	462.4	US-10-194-485-298	Sequence 298, App	966	29	60.4	462.4	US-10-196-758-298	Sequence 298, App
894	29	60.4	462.4	US-10-195-885-298	Sequence 298, App	967	29	60.4	462.4	US-10-198-770-298	Sequence 298, App
895	29	60.4	462.4	US-10-195-885-298	Sequence 298, App	968	29	60.4	462.4	US-10-199-308-298	Sequence 298, App
896	29	60.4	462.4	US-10-196-748-298	Sequence 298, App	969	29	60.4	462.4	US-10-200-617-298	Sequence 298, App
897	29	60.4	462.4	US-10-196-750-298	Sequence 298, App	970	29	60.4	462.4	US-10-205-893-298	Sequence 298, App
898	29	60.4	462.4	US-10-196-750-298	Sequence 298, App	971	29	60.4	462.4	US-10-205-897-298	Sequence 298, App
899	29	60.4	462.4	US-10-197-699-298	Sequence 298, App	972	29	60.4	462.4	US-10-205-896-298	Sequence 298, App
900	29	60.4	462.4	US-10-197-700-298	Sequence 298, App	973	29	60.4	462.4	US-10-195-886-298	Sequence 298, App
901	29	60.4	462.4	US-10-197-708-298	Sequence 298, App	974	29	60.4	462.4	US-10-180-550-298	Sequence 298, App
902	29	60.4	462.4	US-10-198-764-298	Sequence 298, App	975	29	60.4	462.4	US-10-183-014-298	Sequence 298, App
903	29	60.4	462.4	US-10-198-765-298	Sequence 298, App	976	29	60.4	462.4	US-10-187-738-298	Sequence 298, App

```
977 29 60.4 462 4 US-10-187-740-298 Sequence 298, App
978 29 60.4 462 4 US-10-187-883-298 Sequence 298, App
979 29 60.4 462 4 US-10-194-363-298 Sequence 298, App
980 29 60.4 462 4 US-10-194-460-298 Sequence 298, App
981 29 60.4 462 4 US-10-194-463-298 Sequence 298, App
982 29 60.4 462 4 US-10-194-484-298 Sequence 298, App
983 29 60.4 462 4 US-10-195-884-298 Sequence 298, App
984 29 60.4 462 4 US-10-196-744-298 Sequence 298, App
985 29 60.4 462 4 US-10-196-755-298 Sequence 298, App
986 29 60.4 462 4 US-10-197-704-298 Sequence 298, App
987 29 60.4 462 4 US-10-197-710-298 Sequence 298, App
988 29 60.4 462 4 US-10-198-758-298 Sequence 298, App
989 29 60.4 462 4 US-10-198-766-298 Sequence 298, App
990 29 60.4 462 4 US-10-199-304-298 Sequence 298, App
991 29 60.4 462 4 US-10-199-309-298 Sequence 298, App
992 29 60.4 462 4 US-10-199-313-298 Sequence 298, App
993 29 60.4 462 4 US-10-199-456-298 Sequence 298, App
994 29 60.4 462 4 US-10-201-329-298 Sequence 298, App
995 29 60.4 462 4 US-10-202-413-298 Sequence 298, App
996 29 60.4 462 4 US-10-206-919-298 Sequence 298, App
997 29 60.4 462 4 US-10-206-922-298 Sequence 298, App
998 29 60.4 462 4 US-10-206-924-298 Sequence 298, App
999 29 60.4 462 4 US-10-206-928-298 Sequence 298, App
1000 29 60.4 462 4 US-10-207-914-298 Sequence 298, App
```

ALIGNMENTS

```
RESULT 1
US-09-891-823-4
; Sequence 4, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/09/891,823
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-891-823-4

Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMDDL 9
Db 1 TLHEYMDDL 9

RESULT 2
US-09-909-460-105
; Sequence 105, Application US/09909460
; Publication No. US20020182258A1
; GENERAL INFORMATION:
; APPLICANT: Luneford, Lynn B.
; APPLICANT: Putnam, David
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
; TITLE OF INVENTION: ACID
; FILE REFERENCE: 08191/014001
```

```
; CURRENT APPLICATION NUMBER: US/09/909,460
; CURRENT FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 105
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-909-460-105
```

```
Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLHEYMDDL 9
Db 1 TLHEYMDDL 9
```

```
RESULT 3
US-09-872-836-105
; Sequence 105, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Barman, Shikha P.
; APPLICANT: McKeever, Una
; APPLICANT: Hedley, Mary Lynne
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 105
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-105

Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMDDL 9
Db 1 TLHEYMDDL 9

RESULT 4
US-10-128-711-69
; Sequence 69, Application US/10128711
; Publication No. US20030099634A1
; GENERAL INFORMATION:
; APPLICANT: VITIELLO, Maria A.
; APPLICANT: CHESTNUT, Robert W.
; APPLICANT: SETTE, Alessandro D.
; APPLICANT: CELIS, Esteban
; APPLICANT: GRAY, Howard
; TITLE OF INVENTION: CTL IMMUNITY
; NUMBER OF SEQUENCES: 153
; CORRESPONDENCE ADDRESS:
; ADDRESS: Townsend and Townsend Hourie and Crew
; STREET: Stewart Street Tower, One Market Plaza
; CITY: San Francisco
; STATE: California
; COUNTRY: US
; ZIP: 94105-1493
; COMPUTER READABLE FORM:
```

MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/128,711
FILING DATE: 22-Apr-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JUN-1992
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 69:
US-10-128-711-69
Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLHEYMIDL 9
DB 1 TLHEYMIDL 9
RESULT 5
US-10-133-210-270
Sequence 270, Application US/10133210
Publication No. US20030103964A1
GENERAL INFORMATION:
APPLICANT: Delist, Charles
APPLICANT: Berzofsky, Jay
APPLICANT: Gulukota, Kamalakar
APPLICANT: Vaccaro, Dennis
APPLICANT: Weng, Zhiping
APPLICANT: Zhang, Chao
TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND
TITLE OF INVENTION: COMPOSITIONS THEREOF
FILE REFERENCE: BU-035AX
CURRENT APPLICATION NUMBER: US/10/133,210
CURRENT FILING DATE: 2002-04-26
NUMBER OF SEQ ID NOS: 281
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 270
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-133-210-270
Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLHEYMIDL 9
DB 1 TLHEYMIDL 9
RESULT 6
US-10-365-908-4
Sequence 4, Application US/10365908
Publication No. US20030170268A1
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/365,908
CURRENT FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 4
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-365-908-4
Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLHEYMIDL 9
DB 1 TLHEYMIDL 9
RESULT 7
US-10-871-138-4
Sequence 4, Application US/10871138
Publication No. US20040235741A1
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/871,138
CURRENT FILING DATE: 2004-06-18
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 4
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-871-138-4
Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 TLHEYMDDL 9

RESULT 8
US-10-758-970-105
; Sequence 105, Application US/10758970
; Publication No. US20050037086A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Hau, Yung-Yueh
; APPLICANT: Tyo, Michael
; TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
; FILE REFERENCE: 08191-012001
; CURRENT APPLICATION NUMBER: US/10/758,970
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: US/09/715,708A
; PRIOR FILING DATE: 2000-11-17
; PRIOR APPLICATION NUMBER: US 60/166,516
; PRIOR FILING DATE: 1999-11-19
; NUMBER OF SEQ ID NOS: 109
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 105
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-758-970-105

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9

RESULT 9
US-10-751-845-59
; Sequence 59, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 59
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-59

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9

Db 1 TLHEYMDDL 9

* RESULT 10

US-10-924-377-4
; Sequence 4, Application US/10924377
; Publication No. US20050181458A1
; GENERAL INFORMATION:
; APPLICANT: Harding, Fiona
; APPLICANT: Mucha, Jeanette Marie
; TITLE OF INVENTION: HPV CD8+ T-Cell Epitopes
; FILE REFERENCE: GC811-205
; CURRENT APPLICATION NUMBER: US/10/924,377
; CURRENT FILING DATE: 2004-08-23
; PRIOR APPLICATION NUMBER: US 60/500,452
; PRIOR FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 9
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-924-377-4

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9

RESULT 11
US-09-891-823-49
; Sequence 49, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/09/891,823
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 49
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-891-823-49

Query Match 100.0%; Score 48; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.026;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9

RESULT 12
US-10-365-908-49
; Sequence 49, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT

US-10-365-908-49
; Sequence 49, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT

```
FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 49
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-49

Query Match          100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.026;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
   |||||
Db 2 TLHEYMIDL 10

RESULT 13
US-10-871-138-49
; Sequence 49, Application US/10871138
; Publication No. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; CURRENT FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 49
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-871-138-49

Query Match          100.0%; Score 48; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.026;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
   |||||
Db 2 TLHEYMIDL 10

RESULT 14
US-10-648-547-69
; Sequence 69, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
```

```
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 69
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-69

Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
   |||||
Db 6 TLHEYMIDL 14

RESULT 15
US-10-648-547-92
; Sequence 92, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 92
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-92

Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
   |||||
Db 1 TLHEYMIDL 9

RESULT 16
US-10-476-570-45
; Sequence 45, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 45
```

```

; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 6-20
US-10-476-570-45
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLHEYMULD 9
    |||||
Db 2 TLHEYMULD 10
```

```
RESULT 17
US-10-306-541-69
; Sequence 69, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO: 69
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-69
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLHEYMULD 9
    |||||
Db 6 TLHEYMULD 14
```

```
RESULT 18
US-10-306-541-92
; Sequence 92, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO: 92
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-92
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Db 1 TLHEYMULD 9
```

```
RESULT 19
US-10-751-845-67
; Sequence 67, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR FILING DATE: 1999-09-16
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 67
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-67
```

```
Query Match          100.0%; Score 48; DB 5; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLHEYMULD 9
    |||||
Db 1 TLHEYMULD 9
```

```
RESULT 20
US-10-432-465-44
; Sequence 44, Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John
; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; TITLE OF INVENTION: Therapy
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 44
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-44
```

```
Query Match          100.0%; Score 48; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.054;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLHEYMULD 9
    |||||
Db 7 TLHEYMULD 15
```

RESULT 21

US-10-476-570-14
; Sequence 14, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; PRIOR FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 20
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 1-20
US-10-476-570-14

Query Match 100.0%; Score 48; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.054;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TTHEYMLDL 9
Db 7 TTHEYMLDL 15

RESULT 22

US-10-890-526-69
; Sequence 69, Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Jochims, Ingrid
; APPLICANT: Nieland, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; CURRENT FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-69

Query Match 100.0%; Score 48; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.054;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TTHEYMLDL 9
Db 7 TTHEYMLDL 15

Db 7 TTHEYMLDL 15

RESULT 23

US-10-476-570-15
; Sequence 15, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; PRIOR FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 21
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 7-27
US-10-476-570-15

Query Match 100.0%; Score 48; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.056;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TTHEYMLDL 9
Db 1 TTHEYMLDL 9

RESULT 24

US-10-476-570-57
; Sequence 57, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 57
; LENGTH: 23
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 3-25
US-10-476-570-57

Query Match 100.0%; Score 48; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.054;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 0.062;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||
Db 5 TLHEYMIDL 13

RESULT 25

US-10-858-384-14
; Sequence 14, Application US/10858384
; Publication No. US2005003025A1
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILAD, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; PRIOR FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 14
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of the Artificial Sequence: Peptide fragment
; OTHER INFORMATION: for E7 of HPV
US-10-858-384-14

Query Match 100.0%; Score 48; DB 5; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.062;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||
Db 5 TLHEYMIDL 13

RESULT 26

US-09-828-645-3
; Sequence 3, Application US/09828645
; Publication No. US20030027750A1
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-3

Query Match 100.0%; Score 48; DB 3; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9

Db 2 TLHEYMIDL 10
|||||

RESULT 27
US-09-828-645-7
; Sequence 7, Application US/09828645
; Publication No. US20030027750A1
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
; NAME/KEY: misc feature
; LOCATION: (19)-(19)
; OTHER INFORMATION: Xaa = L-carboxymethylcysteine
US-09-828-645-7

Query Match 100.0%; Score 48; DB 3; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||||
Db 2 TLHEYMIDL 10

RESULT 28
US-10-827-007-3
; Sequence 3, Application US/10827007
; Publication No. US20050042599A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; TITLE OF INVENTION: Contemplating Peptides from the E7 Early Coding Region of HPV 16
; FILE REFERENCE: 3352-2-1-3
; CURRENT APPLICATION NUMBER: US/10/827,007
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
US-10-827-007-3

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9
|||||
Db 2 TLHEYMIDL 10

Qy 1 TLHEYMIDL 9

RESULT 29
US-10-827-007-7
; Sequence 7, Application US/10827007
; Publication No. US20050042599A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; TITLE OF INVENTION: Contemplating Peptides from the E7 Early Coding Region of HPV 16
; FILE REFERENCE: 3352-2-1-3
; CURRENT APPLICATION NUMBER: US/10/827,007
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
; NAME/KEY: MISC_FEATURE
; LOCATION: (19)..(19)
; OTHER INFORMATION: Xaa = L-Carboxymethylcysteine
US-10-827-007-7

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLHEYMLDL 9
Db 2 TLHEYMLDL 10

RESULT 30
US-10-827-083-3
; Sequence 3, Application US/10827083
; Publication No. US20050042600A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; TITLE OF INVENTION: Contemplating Peptides from the E7 Early Coding Region of HPV 16
; FILE REFERENCE: 3352-2-1-4
; CURRENT APPLICATION NUMBER: US/10/827,083
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
US-10-827-083-3

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLHEYMLDL 9
Db 2 TLHEYMLDL 10

RESULT 31
US-10-827-083-7
; Sequence 7, Application US/10827083
; Publication No. US20050042600A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; TITLE OF INVENTION: Contemplating Peptides from the E7 Early Coding Region of HPV 16
; FILE REFERENCE: 3352-2-1-4
; CURRENT APPLICATION NUMBER: US/10/827,083
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
; NAME/KEY: MISC_FEATURE
; LOCATION: (19)..(19)
; OTHER INFORMATION: Xaa = L-Carboxymethylcysteine
US-10-827-083-7

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLHEYMLDL 9
Db 2 TLHEYMLDL 10

RESULT 32
US-09-728-466-1
; Sequence 1, Application US/09728466
; Patent No. US20010029022A1
; GENERAL INFORMATION:
; APPLICANT: Fisher, Christopher
; APPLICANT: He, Manxia
; TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
; FILE REFERENCE: 28341/6216
; CURRENT APPLICATION NUMBER: US/09/728,466
; CURRENT FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: 09/382,616
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 1
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match 100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMLDL 9
Db 7 TLHEYMLDL 15

RESULT 33
US-09-820-765-4
; Sequence 4, Application US/09820765

Publication No. US20020039584A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,765
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-765-4
Query Match 100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15
RESULT 34
US-09-824-017-4
Sequence 4, Application US/09824017
Publication No. US2002019768A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017
FILING DATE: 03-Apr-2001
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4
Query Match 100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 35
US-09-986-118A-4
Sequence 4, Application US/09986118A
Publication No. US20030021806A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. US20030021806A1-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEVWLDL 9
| | | | | | | | | |
DB 7 TLHEVWLDL 15

RESULT 36
US-10-267-311-8
Sequence 8, Application US/10267311
Publication No. US20030050469A1
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEVWLDL 9
| | | | | | | | | |
DB 7 TLHEVWLDL 15

RESULT 37
US-10-177-390-8
Sequence 8, Application US/10177390
Publication No. US20030143743A1
GENERAL INFORMATION:
APPLICANT: Schuler, Gerold
APPLICANT: N.V. Antwerp Innovatiecentrum
TITLE OF INVENTION: Improved Transfection of Eucaryotic Cells with linear
TITLE OF INVENTION: Polynucleotides by Electroporation
FILE REFERENCE: 021505w/JH/ml
CURRENT APPLICATION NUMBER: US/10/177,390
CURRENT FILING DATE: 2002-06-20
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: fragment of
OTHER INFORMATION: human papilloma virus type 16 E7 gene
US-10-177-390-8

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEVWLDL 9
| | | | | | | | | |
DB 7 TLHEVWLDL 15

RESULT 38
US-10-201-764-19
Sequence 19, Application US/10201764
Publication No. US20030166140A1
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/201,764
CURRENT FILING DATE: 2002-07-22
PRIOR APPLICATION NUMBER: US/09/566,420
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEVWLDL 9
| | | | | | | | | |
DB 7 TLHEVWLDL 15

RESULT 39
US-10-392-113-29
Sequence 29, Application US/10392113
Publication No. US20030224993A1
GENERAL INFORMATION:
APPLICANT: Land, Hartmut
TITLE OF INVENTION: COMPOSITIONS THAT INHIBIT PROLIFERATION
TITLE OF INVENTION: OF CANCER CELLS
FILE REFERENCE: 21108.000503
CURRENT APPLICATION NUMBER: US/10/392,113
CURRENT FILING DATE: 2003-03-17
PRIOR APPLICATION NUMBER: 60/365,078
PRIOR FILING DATE: 2002-03-15
PRIOR APPLICATION NUMBER: PCT/US01/32127
PRIOR FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 60/239,705
PRIOR FILING DATE: 2000-10-12
NUMBER OF SEQ ID NOS: 45
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 29
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note =
OTHER INFORMATION: Synthetic Construct
US-10-392-113-29

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
| | | | |
DB 7 TLHEYMIDL 15

RESULT 40

US-10-654-129-4
; Sequence 4, Application US/10654129
; Publication No. US2004008161A1
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander

; HALLER, Michael
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
; FORMULATIONS AND METHODS OF USE

; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109

; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/654,129
; FILING DATE: 04-Sep-2003
; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/824,017
; FILING DATE: 03-Apr-2001
; APPLICATION NUMBER: 09/026,896
; FILING DATE: 1998-02-20

; ATTORNEY/AGENT INFORMATION:
; NAME: Sandercock, Collin G.
; REGISTRATION NUMBER: 31,298
; REFERENCE/DOCKET NUMBER: 37067/102

; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear

; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-654-129-4

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
| | | | |
DB 7 TLHEYMIDL 15

RESULT 41

US-10-681-410-19
; Sequence 19, Application US/10681410
; Publication No. US20040096426A1
; GENERAL INFORMATION:
; APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU

; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
; IMMUNE RESPONSE
; FILE REFERENCE: TBA
; CURRENT APPLICATION NUMBER: US/10/681,410
; CURRENT FILING DATE: 2003-10-08

; PRIOR APPLICATION NUMBER: US/10/201,764
; PRIOR FILING DATE: 2002-07-22
; PRIOR APPLICATION NUMBER: US/09/566,420
; PRIOR FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: 60/132,752
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: 60/132,750
; PRIOR FILING DATE: 1999-05-06
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 19
; LENGTH: 98
; TYPE: PRT

; ORGANISM: Human papillomavirus type E7
US-10-681-410-19

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
| | | | |
DB 7 TLHEYMIDL 15

RESULT 42

US-10-772-988-3
; Sequence 3, Application US/10772988
; Publication No. US20040139485A1
; GENERAL INFORMATION:
; APPLICANT: Thorgeirsson, Snorri S.
; APPLICANT: Woltach, Joseph T.
; APPLICANT: Zhang, Minghuang

; TITLE OF INVENTION: CDNA ENCODING A GENE BOG (BST OVER-EXPRESSED GENE) AND ITS PROTEI
; FILE REFERENCE: 11613.29USW1
; CURRENT APPLICATION NUMBER: US/10/772,988
; CURRENT FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: US/09/637,746
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: PCT/US99/04142
; PRIOR FILING DATE: 1999-02-25

; PRIOR APPLICATION NUMBER: US 60/079,567
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: US 60/075,922
; PRIOR FILING DATE: 1998-02-25
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 3
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus

US-10-772-988-3

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLHEYMIDL 9
| | | | |
DB 7 TLHEYMIDL 15

RESULT 43

US-10-479-541-5
; Sequence 5, Application US/10479541
; Publication No. US20040151723A1
; GENERAL INFORMATION:
; APPLICANT: Kirin Beer Kabushiki Kaisha

; TITLE OF INVENTION: Novel E7 antigen epitope from human papillomavirus and
; FILE REFERENCE: 137240PX
; CURRENT APPLICATION NUMBER: US/10/479,541

```
/ CURRENT FILING DATE: 2003-12-04
/ PRIOR APPLICATION NUMBER: 173803/2001
/ PRIOR FILING DATE: 2001-06-08
/ NUMBER OF SEQ ID NOS: 5
/ SOFTWARE: Patentln Ver. 2.1
/ SEQ ID NO 5
/ LENGTH: 98
/ TYPE: PRF
/ ORGANISM: Human papillomavirus type 16
US-10-479-541-5
```

```
Query Match          100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15
```

```
RESULT 44
US-10-042-526A-4
/ Sequence 4, Application US/10042526A
/ Publication No. US20050031636A1
/ GENERAL INFORMATION:
/ APPLICANT: GISSMANN, et al.
/ TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
/ FILE REFERENCE: 27013/38150
/ CURRENT APPLICATION NUMBER: US/10/042,526A
/ PRIOR FILING DATE: 2002-04-29
/ PRIOR APPLICATION NUMBER: US 09/632,286
/ PRIOR FILING DATE: 2000-08-03
/ PRIOR APPLICATION NUMBER: US 08/944,368
/ PRIOR FILING DATE: 1997-10-06
/ NUMBER OF SEQ ID NOS: 28
/ SOFTWARE: Patentln version 3.3
/ SEQ ID NO 4
/ LENGTH: 98
/ TYPE: PRF
/ ORGANISM: Human Papilloma Virus
US-10-042-526A-4
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15
```

```
RESULT 45
US-10-657-399-1
/ Sequence 1, Application US/10657399
/ Publication No. US20050032038A1
/ GENERAL INFORMATION:
/ APPLICANT: Fisher, Christopher
/ APPLICANT: He, Manxia
/ TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
/ FILE REFERENCE: 28341/6216
/ CURRENT APPLICATION NUMBER: US/10/657,399
/ PRIOR FILING DATE: 2003-09-08
/ PRIOR APPLICATION NUMBER: US/09/728,466
/ PRIOR FILING DATE: 2000-12-01
/ PRIOR APPLICATION NUMBER: 09/382,616
/ PRIOR FILING DATE: 1999-08-25
/ NUMBER OF SEQ ID NOS: 43
/ SOFTWARE: Patentln Ver. 2.0
/ SEQ ID NO 1
/ LENGTH: 98
/ TYPE: PRF
/ ORGANISM: Papillomavirus sylvilagi
US-10-657-399-1
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15
```

```
RESULT 46
US-10-858-384-12
/ Sequence 12, Application US/10858384
/ Publication No. US20050033025A1
/ GENERAL INFORMATION:
/ APPLICANT: CHOPPIN, JEANNINE
/ APPLICANT: BOURGAULT VILLADA, ISABELLE
/ APPLICANT: GUILLET, JEAN-GERARD
/ APPLICANT: CONNAN, FRANCINE
/ APPLICANT: FERRIES, ESTELLE
/ TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
/ TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
/ FILE REFERENCE: 0508-1037-1
/ CURRENT APPLICATION NUMBER: US/10/858,384
/ PRIOR FILING DATE: 2004-06-02
/ PRIOR APPLICATION NUMBER: FR 9907012
/ PRIOR FILING DATE: 1999-06-03
/ NUMBER OF SEQ ID NOS: 24
/ SOFTWARE: Patentln Ver. 3.2
/ SEQ ID NO 12
/ LENGTH: 98
/ TYPE: PRF
/ ORGANISM: Human Papillomavirus
US-10-858-384-12
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15
```

```
RESULT 47
US-10-484-063-26
/ Sequence 26, Application US/10484063
/ Publication No. US20050048467A1
/ GENERAL INFORMATION:
/ APPLICANT: SASTRY, K. JAGANNADHA
/ APPLICANT: TORTOLERO-LUNA, GUILTERMO
/ APPLICANT: FOLLEN, MICHELE
/ TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
/ TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
/ FILE REFERENCE: UTSC:560US
/ CURRENT APPLICATION NUMBER: US/10/484,063
/ PRIOR FILING DATE: 2004-01-16
/ PRIOR APPLICATION NUMBER: PCT/US02/23198
/ PRIOR FILING DATE: 2002-07-19
/ PRIOR APPLICATION NUMBER: 60/306,809
/ PRIOR FILING DATE: 2001-07-20
/ NUMBER OF SEQ ID NOS: 27
/ SOFTWARE: Patentln Ver. 2.1
/ SEQ ID NO 26
/ LENGTH: 98
/ TYPE: PRF
/ ORGANISM: Human papillomavirus type 16
US-10-484-063-26
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 1 TLHEYMDDL 9
|||||
Db 7 TLHEYMDDL 15

RESULT 48
US-10-343-448-5
; Sequence 5, Application US/10343448
; Publication No. US20050054820A1
; GENERAL INFORMATION:
; APPLICANT: WU, Tzzy-Chou
; APPLICANT: HUNG, Chien-Fu
; TITLE OF INVENTION: MOLECULAR VACCINE LINKING AN ENDOPLASMIC RETICULUM CHAPERONE
; TITLE OF INVENTION: POLYPEPTIDE TO AN ANTIGEN
; FILE REFERENCE: 2240-186463
; CURRENT APPLICATION NUMBER: US/10/343,448
; PRIOR FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: PCT/US01/24134
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: US 60/222,902
; PRIOR FILING DATE: 2000-08-03
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-343-448-5

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 7 TLHEYMDDL 15

RESULT 49
US-10-679-956-8
; Sequence 8, Application US/10679956
; Publication No. US20050089841A1
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/679,956
; PRIOR FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-679-956-8

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 7 TLHEYMDDL 15

RESULT 50
US-10-367-057-17
; Sequence 17, Application US/10367057
; Publication No. US20050100554A1
; GENERAL INFORMATION:
; APPLICANT: Cuthill, Scott;
; APPLICANT: Jackson, Amanda;
; APPLICANT: Lewin, David A.;
; APPLICANT: Ooi, Chean Eng
; TITLE OF INVENTION: Complexes and Methods of Using Same
; FILE REFERENCE: 21402-559
; CURRENT APPLICATION NUMBER: US/10/367,057
; PRIOR FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 60/256,911
; PRIOR FILING DATE: 2002-02-14
; NUMBER OF SEQ ID NOS: 198
; SOFTWARE: Curoseqqlist version 0.1
; SEQ ID NO 17
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-367-057-17

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLHEYMDDL 9
|||||
Db 7 TLHEYMDDL 15

Search completed: May 5, 2006, 08:06:31
Job time : 63 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 07:56:56 ; Search time 8.4 Seconds
(without alignments)
49,591 Million cell updates/sec

Title: US-08-170-344-13
Perfect score: 48
Sequence: 1 TLHEXYMLDL 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database :

1: /SIDSS/ptodata/1/pubppaa/US08_NEW_PUB.pep1:*
2: /SIDSS/ptodata/1/pubppaa/US06_NEW_PUB.pep:*
3: /SIDSS/ptodata/1/pubppaa/US07_NEW_PUB.pep:*
4: /SIDSS/ptodata/1/pubppaa/US08_NEW_PUB.pep:*
5: /SIDSS/ptodata/1/pubppaa/US09_NEW_PUB.pep:*
6: /SIDSS/ptodata/1/pubppaa/US10_NEW_PUB.pep:*
7: /SIDSS/ptodata/1/pubppaa/US11_NEW_PUB.pep:*
8: /SIDSS/ptodata/1/pubppaa/US12_NEW_PUB.pep:*
9: /SIDSS/ptodata/1/pubppaa/US13_NEW_PUB.pep:*
10: /SIDSS/ptodata/1/pubppaa/US14_NEW_PUB.pep:*
11: /SIDSS/ptodata/1/pubppaa/US15_NEW_PUB.pep:*
12: /SIDSS/ptodata/1/pubppaa/US16_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	48	100.0	98	US-10-511-814-8	Sequence 8, Appl1
2	48	100.0	98	US-10-511-814-11	Sequence 11, Appl1
3	48	100.0	98	US-10-530-253-14	Sequence 14, Appl1
4	48	100.0	98	US-11-179-478-4	Sequence 4, Appl1
5	48	100.0	248	US-10-530-253-1	Sequence 1, Appl1
6	48	100.0	248	US-10-530-253-3	Sequence 3, Appl1
7	48	100.0	248	US-10-530-253-5	Sequence 5, Appl1
8	48	100.0	248	US-10-530-253-7	Sequence 7, Appl1
9	48	100.0	248	US-10-530-253-9	Sequence 9, Appl1
10	48	100.0	248	US-10-530-253-11	Sequence 11, Appl1
11	48	100.0	256	US-11-192-923A-2	Sequence 2, Appl1
12	39	81.2	15	US-10-530-061-1711	Sequence 1711, Ap
13	36	75.0	98	US-10-530-253-36	Sequence 36, Appl1
14	35	72.9	11	US-10-530-061-133	Sequence 133, App
15	35	72.9	11	US-10-530-061-145	Sequence 145, Appl
16	35	72.9	97	US-10-530-253-29	Sequence 29, Appl1
17	35	72.9	501	US-10-496-399-3	Sequence 3, Appl1
18	35	72.9	501	US-11-191-072-2	Sequence 2, Appl1
19	34	70.8	1032	US-10-392-234A-67	Sequence 67, Appl1
20	34	70.8	1191	US-11-139-435-2	Sequence 2, Appl1
21	34	70.8	1193	US-11-139-435-3	Sequence 3, Appl1

22	33	68.8	98	US-10-530-253-28	Sequence 28, Appl1
23	33	68.8	99	US-10-530-253-30	Sequence 30, Appl1
24	33	68.8	317	US-11-096-568A-25429	Sequence 25429, A
25	33	68.8	329	US-11-096-568A-25428	Sequence 25428, A
26	33	68.8	338	US-11-096-568A-25427	Sequence 25427, A
27	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
28	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
29	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
30	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
31	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
32	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
33	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
34	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
35	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
36	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
37	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
38	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
39	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
40	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
41	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
42	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
43	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
44	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
45	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
46	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
47	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
48	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
49	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
50	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
51	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
52	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
53	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
54	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
55	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
56	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
57	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
58	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
59	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
60	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
61	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
62	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
63	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
64	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
65	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
66	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
67	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
68	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
69	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
70	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
71	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
72	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
73	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
74	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
75	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
76	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
77	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
78	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
79	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
80	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
81	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
82	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
83	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
84	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
85	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
86	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
87	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
88	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
89	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
90	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
91	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
92	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
93	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap
94	33	68.8	510	US-11-188-298-5118	Sequence 5118, Ap

95	62.5	212	11	US-11-096-568A-374	Sequence 374, App	188	60.4	439	11	US-11-096-568A-33699	Sequence 33699, A
96	62.5	212	11	US-11-096-568A-19700	Sequence 19700, A	189	60.4	452	11	US-11-096-568A-31741	Sequence 31741, A
97	62.5	213	11	US-11-096-568A-22424	Sequence 22424, A	190	60.4	462	9	US-10-196-487-298	Sequence 298, App
98	62.5	220	11	US-11-096-568A-19044	Sequence 19044, A	191	60.4	462	9	US-10-196-883-298	Sequence 298, App
99	62.5	264	11	US-11-096-568A-14569	Sequence 14569, A	192	60.4	462	9	US-10-195-888-998	Sequence 298, App
100	62.5	270	11	US-11-188-298-19475	Sequence 19475, A	193	60.4	462	9	US-10-195-889-298	Sequence 298, App
101	62.5	306	11	US-11-096-568A-32666	Sequence 32666, A	194	60.4	471	11	US-11-096-568A-11089	Sequence 13089, A
102	62.5	317	11	US-11-096-568A-371	Sequence 371, App	195	60.4	498	11	US-11-096-568A-31740	Sequence 31740, A
103	62.5	318	11	US-11-188-298-9044	Sequence 9044, App	196	60.4	502	11	US-11-096-568A-31734	Sequence 31734, A
104	62.5	340	11	US-11-096-568A-10723	Sequence 10723, App	197	60.4	516	11	US-11-222-406A-18	Sequence 18, App1
105	62.5	348	11	US-11-096-568A-32865	Sequence 32865, A	198	60.4	516	11	US-11-096-568A-33698	Sequence 33698, A
106	62.5	353	11	US-11-096-568A-32864	Sequence 32864, A	199	60.4	527	11	US-11-096-568A-31733	Sequence 31733, A
107	62.5	354	11	US-11-096-568A-22423	Sequence 22423, A	200	60.4	541	11	US-11-096-568A-33697	Sequence 33697, A
108	62.5	364	11	US-11-096-568A-10722	Sequence 10722, A	201	60.4	557	11	US-11-096-568A-31732	Sequence 31732, A
109	62.5	531	9	US-10-485-517-276	Sequence 276, App1	202	60.4	584	11	US-11-096-568A-31265	Sequence 31265, A
110	62.5	536	11	US-11-076-074-2	Sequence 2, App1	203	60.4	610	11	US-11-096-568A-31264	Sequence 31264, A
111	62.5	852	9	US-10-467-657-5504	Sequence 5504, App	204	60.4	640	11	US-11-096-568A-31263	Sequence 31263, A
112	62.5	1306	9	US-10-467-657-5406	Sequence 5406, App	205	60.4	640	11	US-11-232-406A-12	Sequence 12, App1
113	62.5	1464	11	US-11-076-074-1	Sequence 1, App1	206	60.4	688	11	US-11-079-463-9853	Sequence 9853, App
114	62.5	4913	9	US-10-453-372-1142	Sequence 1142, App	207	60.4	728	11	US-11-079-463-9853	Sequence 9853, App
115	62.5	4961	9	US-10-453-372-1132	Sequence 1132, App	208	60.4	736	11	US-11-079-463-9853	Sequence 9853, App
116	60.4	9	9	US-10-530-061-139	Sequence 139, App	209	60.4	778	11	US-11-072-512-3477	Sequence 3477, App
117	60.4	9	9	US-10-530-061-139	Sequence 139, App	210	60.4	790	8	US-10-511-937-2937	Sequence 2937, App
118	60.4	10	9	US-10-530-061-134	Sequence 134, App	211	60.4	971	11	US-11-188-298-4425	Sequence 4425, App
119	60.4	10	9	US-10-530-061-134	Sequence 134, App	212	60.4	974	11	US-11-188-298-15681	Sequence 15681, A
120	60.4	78	11	US-11-079-463-9870	Sequence 9870, App	213	60.4	979	11	US-11-072-512-2446	Sequence 2446, App
121	60.4	79	9	US-10-485-788A-709	Sequence 709, App	214	60.4	987	11	US-10-949-720-395	Sequence 395, App
122	60.4	79	11	US-11-053-076-79	Sequence 79, App1	215	60.4	987	11	US-11-203-551A-89	Sequence 89, App1
123	60.4	90	9	US-10-485-788A-725	Sequence 725, App1	216	60.4	990	9	US-10-821-234-1201	Sequence 1201, App
124	60.4	90	11	US-11-053-076-95	Sequence 95, App1	217	60.4	1586	9	US-10-506-454-1041	Sequence 1041, App
125	60.4	124	11	US-11-087-099-9983	Sequence 9983, App	218	58.3	93	11	US-11-004-399-2470	Sequence 2470, App
126	60.4	190	11	US-11-096-568A-16124	Sequence 16124, A	219	58.3	93	9	US-10-485-788A-643	Sequence 643, App
127	60.4	190	11	US-11-096-568A-26107	Sequence 26107, A	220	58.3	93	11	US-11-053-076-11	Sequence 11, App1
128	60.4	230	9	US-10-507-720-59	Sequence 59, App1	221	58.3	109	9	US-10-530-253-91	Sequence 91, App1
129	60.4	231	11	US-11-096-568A-16123	Sequence 16123, A	222	58.3	112	9	US-10-821-234-1035	Sequence 1035, App
130	60.4	231	11	US-11-096-568A-16634	Sequence 16634, A	223	58.3	132	11	US-11-073-605-15	Sequence 15, App1
131	60.4	231	11	US-11-096-568A-25618	Sequence 25618, A	224	58.3	132	11	US-11-064-774A-151	Sequence 151, App1
132	60.4	231	11	US-11-096-568A-26106	Sequence 26106, A	225	58.3	132	11	US-11-075-400-92	Sequence 92, App1
133	60.4	253	11	US-11-045-004-1916	Sequence 1916, App	226	58.3	132	11	US-11-075-400-92	Sequence 92, App1
134	60.4	260	11	US-11-087-099-4962	Sequence 4962, App	227	58.3	204	11	US-11-096-568A-23094	Sequence 23094, A
135	60.4	261	11	US-11-096-568A-13091	Sequence 13091, A	228	58.3	212	9	US-10-793-626-1628	Sequence 1628, App
136	60.4	275	11	US-11-096-568A-13691	Sequence 13691, A	229	58.3	212	9	US-10-793-626-1966	Sequence 1966, App
137	60.4	276	11	US-11-096-568A-16122	Sequence 16122, A	230	58.3	213	11	US-11-096-568A-33117	Sequence 33117, App
138	60.4	276	11	US-11-096-568A-16633	Sequence 16633, A	231	58.3	221	11	US-11-188-298-18679	Sequence 18679, A
139	60.4	276	11	US-11-096-568A-25617	Sequence 25617, A	232	58.3	225	9	US-10-506-454-1563	Sequence 1563, App
140	60.4	285	9	US-10-873-528-31	Sequence 31, App1	233	58.3	229	9	US-10-793-626-2818	Sequence 2818, App
141	60.4	288	11	US-11-096-568A-31742	Sequence 31742, A	234	58.3	233	11	US-11-087-099-3263	Sequence 3263, App
142	60.4	298	11	US-11-096-568A-26105	Sequence 26105, A	235	58.3	235	11	US-11-188-298-15310	Sequence 15310, A
143	60.4	299	11	US-11-096-568A-16632	Sequence 16632, A	236	58.3	236	11	US-11-188-298-1845	Sequence 1845, App
144	60.4	305	11	US-11-096-568A-25616	Sequence 25616, A	237	58.3	237	11	US-11-096-568A-23093	Sequence 23093, A
145	60.4	305	11	US-11-096-568A-30358	Sequence 30358, A	238	58.3	240	11	US-11-096-568A-10658	Sequence 10658, A
146	60.4	308	11	US-11-079-463-9738	Sequence 9738, App	239	58.3	245	11	US-11-087-099-1532	Sequence 1532, App
147	60.4	312	11	US-11-188-298-17601	Sequence 17601, A	240	58.3	246	11	US-11-234-115-3	Sequence 3, App1
148	60.4	318	11	US-11-188-298-20065	Sequence 20065, A	241	58.3	249	9	US-10-467-657-1500	Sequence 4500, App
149	60.4	318	11	US-11-188-298-21388	Sequence 21388, A	242	58.3	252	9	US-10-506-454-1021	Sequence 1021, App
150	60.4	335	11	US-11-087-099-8643	Sequence 8643, App	243	58.3	254	11	US-11-188-298-9422	Sequence 9422, App
151	60.4	341	11	US-11-079-463-7853	Sequence 7853, App	244	58.3	255	11	US-11-188-298-13922	Sequence 13922, A
152	60.4	342	11	US-11-188-298-16578	Sequence 16578, A	245	58.3	261	11	US-11-188-298-12822	Sequence 12822, A
153	60.4	342	11	US-11-008-570-46	Sequence 46, App1	246	58.3	267	11	US-11-188-298-11665	Sequence 11665, A
154	60.4	354	9	US-10-485-517-179	Sequence 179, App	247	58.3	271	11	US-11-188-298-3650	Sequence 3650, App
155	60.4	354	9	US-10-485-517-366	Sequence 366, App	248	58.3	271	11	US-11-188-298-11044	Sequence 11044, App
156	60.4	366	11	US-11-087-099-11536	Sequence 11536, A	249	58.3	272	11	US-11-188-298-1710	Sequence 1710, App
157	60.4	367	11	US-11-096-568A-30357	Sequence 30357, A	250	58.3	272	11	US-11-188-298-20877	Sequence 20877, App
158	60.4	374	11	US-11-096-568A-13690	Sequence 13690, A	251	58.3	273	11	US-11-188-298-6031	Sequence 6031, App
159	60.4	375	11	US-11-096-568A-13690	Sequence 13690, A	252	58.3	274	11	US-11-072-512-3108	Sequence 3108, App
160	60.4	389	11	US-11-096-568A-30356	Sequence 30356, A	253	58.3	274	11	US-11-188-298-414	Sequence 4124, App
161	60.4	390	11	US-11-096-568A-13689	Sequence 13689, A	254	58.3	275	11	US-11-188-298-18080	Sequence 18080, A
162	60.4	390	11	US-11-188-298-7867	Sequence 7867, App	255	58.3	276	11	US-11-072-512-2544	Sequence 2544, App
163	60.4	397	11	US-11-087-099-4203	Sequence 4203, App	256	58.3	276	11	US-11-096-568A-330981	Sequence 30981, A
164	60.4	407	11	US-11-079-463-8241	Sequence 8241, App	257	58.3	276	11	US-11-188-298-3988	Sequence 3988, App
165	60.4	418	11	US-11-109-156-2	Sequence 2, App1	258	58.3	276	11	US-11-188-298-10827	Sequence 10827, A
166	60.4	418	11	US-11-099-691-1	Sequence 1, App1	259	58.3	277	11	US-11-188-298-14167	Sequence 14167, A
167	60.4	434	11	US-11-087-099-6563	Sequence 6563, App	260	58.3	278	11	US-11-188-298-6874	Sequence 6874, App

241	28	58.3	279	11	US-11-188-298-20140	Sequence 20140, A	314	28	58.3	985	11	US-11-113-424-61	Sequence 61, Appl
242	28	58.3	285	11	US-11-188-298-18918	Sequence 18918, A	315	28	58.3	986	11	US-11-203-251A-80	Sequence 80, Appl
243	28	58.3	294	11	US-11-096-568A-23092	Sequence 23092, A	316	28	58.3	987	11	US-10-770-726-61	Sequence 61, Appl
244	28	58.3	294	11	US-11-188-298-2562	Sequence 2562, Ap	317	28	58.3	987	11	US-11-203-251A-87	Sequence 87, Appl
245	28	58.3	294	11	US-11-188-298-5119	Sequence 5119, Ap	318	28	58.3	990	9	US-10-506-454-1671	Sequence 1671, Ap
246	28	58.3	294	11	US-11-188-298-13478	Sequence 13478, A	319	28	58.3	995	11	US-11-113-424-62	Sequence 62, Appl
247	28	58.3	296	11	US-11-188-298-40998	Sequence 20998, A	320	28	58.3	998	9	US-10-510-524-1	Sequence 1, Appl
248	28	58.3	300	11	US-11-188-298-8535	Sequence 8535, Ap	321	28	58.3	998	11	US-11-203-251A-83	Sequence 83, Appl
249	28	58.3	300	11	US-11-188-298-12009	Sequence 12009, A	322	28	58.3	998	11	US-11-203-251A-88	Sequence 88, Appl
250	28	58.3	301	11	US-11-188-298-12152	Sequence 12152, A	323	28	58.3	1000	11	US-11-188-298-2118	Sequence 2118, A
251	28	58.3	301	11	US-11-188-298-22501	Sequence 22501, A	324	28	58.3	1003	11	US-11-188-298-5308	Sequence 5308, Ap
252	28	58.3	309	11	US-11-188-298-4917	Sequence 4917, Ap	325	28	58.3	1005	11	US-11-203-251A-84	Sequence 84, Appl
253	28	58.3	315	11	US-11-188-298-7490	Sequence 7490, Ap	326	28	58.3	1005	11	US-11-169-041-155	Sequence 155, App
254	28	58.3	320	11	US-11-188-298-2784	Sequence 2784, Ap	327	28	58.3	1055	11	US-11-072-175-139	Sequence 139, App
255	28	58.3	321	11	US-10-793-626-2816	Sequence 2816, Ap	328	28	58.3	1055	11	US-11-203-251A-86	Sequence 86, Appl
256	28	58.3	321	11	US-11-188-298-607	Sequence 607, App	329	28	58.3	1184	9	US-10-973-115B-412	Sequence 412, App
257	28	58.3	322	11	US-11-188-298-18463	Sequence 18463, A	330	28	58.3	1184	9	US-10-137-873A-412	Sequence 412, App
258	28	58.3	330	9	US-10-786-065-8	Sequence 8, Appl	331	28	58.3	1184	9	US-10-152-370-412	Sequence 412, App
259	28	58.3	330	9	US-10-786-065-9	Sequence 9, Appl	332	28	58.3	1184	9	US-11-290-153-412	Sequence 412, App
260	28	58.3	330	9	US-10-786-065-10	Sequence 10, Appl	333	28	58.3	1184	9	US-11-124-367A-402	Sequence 402, App
261	28	58.3	330	9	US-11-096-568A-30980	Sequence 30980, A	334	28	58.3	1184	11	US-11-124-367A-401	Sequence 401, App
262	28	58.3	336	11	US-11-188-298-9710	Sequence 9710, A	335	28	58.3	1515	11	US-11-124-367A-406	Sequence 406, App
263	28	58.3	346	11	US-11-096-568A-30979	Sequence 30979, A	336	28	58.3	1516	11	US-11-124-367A-403	Sequence 403, App
264	28	58.3	348	9	US-10-454-437-436	Sequence 436, App	337	28	58.3	1518	11	US-11-124-367A-404	Sequence 404, App
265	28	58.3	351	11	US-11-188-298-11400	Sequence 11400, A	338	28	58.3	1532	11	US-11-124-367A-405	Sequence 405, App
266	28	58.3	353	9	US-10-506-454-302	Sequence 302, App	339	28	58.3	1532	11	US-11-124-367A-407	Sequence 407, App
267	28	58.3	364	11	US-11-096-568A-17705	Sequence 17705, A	340	28	58.3	1532	11	US-11-124-367A-408	Sequence 408, App
268	28	58.3	371	11	US-11-096-568A-17704	Sequence 17704, A	341	28	58.3	1535	11	US-11-124-367A-408	Sequence 388, App
269	28	58.3	379	9	US-10-530-240-2	Sequence 2, Appl	342	28	58.3	1535	11	US-10-895-064-388	Sequence 388, App
270	28	58.3	380	11	US-11-188-298-1561	Sequence 1561, Ap	343	28	58.3	2723	9	US-11-129-741-388	Sequence 388, App
271	28	58.3	391	11	US-11-188-298-4602	Sequence 4602, Ap	344	28	58.3	2723	11	US-11-129-741-3318	Sequence 1721, Ap
272	28	58.3	404	11	US-11-096-568A-12273	Sequence 12273, A	345	28	58.3	2723	11	US-11-129-741-3318	Sequence 1745, Ap
273	28	58.3	407	11	US-11-096-568A-17703	Sequence 17703, A	346	28	58.3	2723	11	US-11-151-691-43	Sequence 43, Appl
274	28	58.3	411	11	US-11-096-568A-12272	Sequence 12272, A	347	27	56.2	15	9	US-10-530-061-1124	Sequence 758, Appl
275	28	58.3	416	11	US-11-146-428-114	Sequence 114, App	348	27	56.2	15	9	US-11-004-329-758	Sequence 26870, A
276	28	58.3	424	11	US-11-096-568A-2554	Sequence 2554, Ap	349	27	56.2	49	11	US-11-096-568A-26868	Sequence 6821, Ap
277	28	58.3	429	11	US-11-047-383-12	Sequence 12, Appl	350	27	56.2	85	11	US-11-188-298-184490	Sequence 925, App
278	28	58.3	447	9	US-10-858-730-220	Sequence 220, Appl	351	27	56.2	90	9	US-11-096-568A-16108	Sequence 26669, A
279	28	58.3	447	11	US-11-096-568A-12271	Sequence 12271, A	352	27	56.2	90	9	US-11-096-568A-16108	Sequence 270, App
280	28	58.3	447	11	US-11-265-288-10	Sequence 10, Appl	353	27	56.2	99	11	US-11-096-568A-16108	Sequence 17568, A
281	28	58.3	451	8	US-10-505-928-509	Sequence 509, App	354	27	56.2	131	11	US-11-096-568A-16108	Sequence 24038, A
282	28	58.3	459	11	US-11-096-568A-6023	Sequence 6023, Ap	355	27	56.2	131	11	US-11-096-568A-16108	Sequence 181, App
283	28	58.3	460	11	US-11-096-568A-2553	Sequence 2553, Ap	356	27	56.2	145	11	US-11-096-568A-16108	Sequence 1844, Ap
284	28	58.3	464	11	US-11-096-568A-6022	Sequence 6022, Ap	357	27	56.2	145	11	US-11-096-568A-16108	Sequence 1884, Ap
285	28	58.3	468	11	US-11-096-568A-6021	Sequence 6021, Ap	358	27	56.2	158	11	US-11-096-568A-16108	Sequence 1884, Ap
286	28	58.3	476	11	US-11-087-099-4984	Sequence 4984, Ap	359	27	56.2	158	11	US-11-096-568A-16108	Sequence 1884, Ap
287	28	58.3	476	11	US-11-087-099-6024	Sequence 6024, Ap	360	27	56.2	169	11	US-11-096-568A-16108	Sequence 1884, Ap
288	28	58.3	486	11	US-11-096-568A-2552	Sequence 2552, Ap	361	27	56.2	174	9	US-10-724-598-45	Sequence 1884, Ap
289	28	58.3	505	11	US-11-087-099-6445	Sequence 6445, Ap	362	27	56.2	174	9	US-10-724-598-45	Sequence 1884, Ap
290	28	58.3	507	9	US-10-226-486-57	Sequence 57, Appl	363	27	56.2	175	11	US-11-096-568A-16108	Sequence 1884, Ap
291	28	58.3	520	11	US-11-188-298-12521	Sequence 12521, A	364	27	56.2	182	11	US-11-096-568A-16108	Sequence 1884, Ap
292	28	58.3	521	11	US-11-188-298-11698	Sequence 11698, A	365	27	56.2	185	11	US-11-096-568A-16108	Sequence 1884, Ap
293	28	58.3	523	11	US-11-087-099-11876	Sequence 11876, A	366	27	56.2	185	11	US-11-096-568A-16108	Sequence 1884, Ap
294	28	58.3	527	11	US-11-240-341-44	Sequence 44, Appl	367	27	56.2	196	11	US-11-096-568A-16108	Sequence 1884, Ap
295	28	58.3	575	11	US-11-188-298-10084	Sequence 10084, A	368	27	56.2	200	11	US-11-188-298-13598	Sequence 1884, Ap
296	28	58.3	623	11	US-11-188-298-15367	Sequence 15367, A	369	27	56.2	204	11	US-11-264-056-181	Sequence 1884, Ap
297	28	58.3	692	8	US-10-509-131-32	Sequence 32, Appl	370	27	56.2	206	11	US-11-087-099-11844	Sequence 1884, Ap
298	28	58.3	725	11	US-11-188-298-8443	Sequence 8443, Ap	371	27	56.2	207	11	US-11-087-099-11844	Sequence 1884, Ap
299	28	58.3	745	11	US-11-188-298-5540	Sequence 5540, Ap	372	27	56.2	207	11	US-11-144-947-516	Sequence 1884, Ap
300	28	58.3	802	9	US-10-194-487-512	Sequence 312, App	373	27	56.2	216	11	US-11-106-399-8	Sequence 1884, Ap
301	28	58.3	802	9	US-10-195-883-312	Sequence 312, App	374	27	56.2	216	11	US-11-096-568A-11420	Sequence 1884, Ap
302	28	58.3	802	9	US-10-195-888-112	Sequence 312, App	375	27	56.2	216	11	US-11-096-568A-16580	Sequence 1884, Ap
303	28	58.3	802	9	US-10-195-889-312	Sequence 312, App	376	27	56.2	219	11	US-11-096-568A-25155	Sequence 1884, Ap
304	28	58.3	833	11	US-11-188-298-12325	Sequence 12325, A	377	27	56.2	225	11	US-11-096-568A-18987	Sequence 1884, Ap
305	28	58.3	878	11	US-11-103-957-7	Sequence 7, Appl	378	27	56.2	227	11	US-11-096-568A-19426	Sequence 1884, Ap
306	28	58.3	878	11	US-11-018-868-23	Sequence 23, Appl	379	27	56.2	229	11	US-11-096-568A-25842	Sequence 1884, Ap
307	28	58.3	882	9	US-10-516-100-2	Sequence 2, Appl	380	27	56.2	231	11	US-11-144-947-633	Sequence 1884, Ap
308	28	58.3	920	9	US-10-330-773-376	Sequence 376, App	381	27	56.2	232	11	US-11-096-568A-19425	Sequence 1884, Ap
309	28	58.3	926	9	US-10-841-129-2	Sequence 2, Appl	382	27	56.2	248	11	US-11-096-568A-1945	Sequence 1884, Ap
310	28	58.3	941	11	US-11-079-463-6927	Sequence 6927, Ap	383	27	56.2	248	11	US-11-087-099-1459	Sequence 1884, Ap
311	28	58.3	950	8	US-10-511-937-4603	Sequence 2603, Ap	384	27	56.2	252	11	US-11-144-947-332	Sequence 1884, Ap
312	28	58.3	984	11	US-11-113-424-60	Sequence 60, Appl	385	27	56.2	254	11	US-11-096-568A-3795	Sequence 3795, Ap
313	28	58.3	984	11	US-11-203-251A-85	Sequence 85, Appl	386	27	56.2	254	11	US-11-096-568A-3795	Sequence 3795, Ap

387	254	11	US-11-096-568A-11419	Sequence 11419, A	460	27	56.2	402	11	US-11-096-568A-20505	Sequence 20505, A
388	267	11	US-11-096-568A-24104	Sequence 24104, A	461	27	56.2	409	11	US-11-087-099-2414	Sequence 2414, Ap
389	269	11	US-11-096-568A-17566	Sequence 17566, A	462	27	56.2	410	11	US-11-188-298-9180	Sequence 9180, Ap
390	271	11	US-11-087-099-2401	Sequence 2401, Ap	463	27	56.2	410	11	US-11-188-298-11564	Sequence 11564, A
391	271	11	US-11-087-099-2750	Sequence 2750, Ap	464	27	56.2	424	9	US-10-921-793-10	Sequence 30, Appl
392	271	11	US-11-087-099-4667	Sequence 4667, Ap	465	27	56.2	424	9	US-10-931-198-10	Sequence 30, Appl
393	271	11	US-11-087-099-5728	Sequence 5728, Ap	466	27	56.2	424	9	US-10-942-042-10	Sequence 30, Appl
394	271	11	US-11-087-099-5782	Sequence 5782, Ap	467	27	56.2	424	9	US-11-128-937-3	Sequence 3, Appl1
395	271	11	US-11-087-099-7730	Sequence 7730, Ap	468	27	56.2	427	11	US-11-186-298-91	Sequence 91, Appl1
396	271	11	US-11-087-099-11152	Sequence 11152, A	469	27	56.2	435	11	US-11-087-099-6985	Sequence 6985, Ap
397	271	11	US-11-096-568A-23464	Sequence 23464, A	470	27	56.2	435	11	US-11-188-298-17434	Sequence 17434, A
398	271	11	US-11-096-568A-25153	Sequence 25153, A	471	27	56.2	439	11	US-11-096-568A-32725	Sequence 32725, A
399	272	11	US-11-087-099-5910	Sequence 5910, Ap	472	27	56.2	440	11	US-11-098-668A-10923	Sequence 10923, A
400	273	11	US-11-196-475-13	Sequence 13, Appl	473	27	56.2	443	9	US-10-131-8266A-318	Sequence 318, Ap
401	274	11	US-11-096-568A-25841	Sequence 25841, A	474	27	56.2	443	9	US-10-973-1158A-318	Sequence 318, Ap
402	277	11	US-11-096-568A-11418	Sequence 11418, A	475	27	56.2	443	9	US-10-137-873A-318	Sequence 318, Ap
403	279	11	US-11-079-463-7582	Sequence 7582, Ap	476	27	56.2	443	9	US-10-152-370-318	Sequence 318, Ap
404	279	11	US-11-096-568A-24103	Sequence 24103, A	477	27	56.2	443	9	US-11-065-695-16	Sequence 16, Ap
405	287	11	US-11-096-568A-32436	Sequence 32436, A	478	27	56.2	443	11	US-11-290-153-318	Sequence 318, Ap
406	287	11	US-11-188-298-3723	Sequence 373, Ap	479	27	56.2	447	11	US-11-169-041-142	Sequence 142, Ap
407	291	9	US-10-454-437-36	Sequence 36, Appl	480	27	56.2	449	11	US-11-096-568A-24583	Sequence 24583, A
408	292	11	US-11-096-568A-20507	Sequence 20507, A	481	27	56.2	455	11	US-11-096-568A-24582	Sequence 24582, A
409	293	11	US-11-096-568A-17122	Sequence 17122, A	482	27	56.2	465	11	US-11-096-568A-1517	Sequence 1517, Ap
410	293	11	US-11-096-568A-25840	Sequence 25840, A	483	27	56.2	475	9	US-10-878-556A-115	Sequence 115, Ap
411	295	11	US-11-128-937-1	Sequence 1, Appl1	484	27	56.2	478	11	US-11-096-568A-3136	Sequence 3136, Ap
412	295	11	US-11-096-568A-3794	Sequence 3794, Ap	485	27	56.2	481	11	US-11-072-512-2394	Sequence 2394, Ap
413	295	11	US-11-096-568A-21256	Sequence 21256, A	486	27	56.2	483	11	US-11-096-568A-3135	Sequence 3135, Ap
414	295	11	US-11-188-298-21960	Sequence 21960, A	487	27	56.2	483	11	US-11-096-568A-3137	Sequence 3137, Ap
415	297	11	US-11-096-568A-18986	Sequence 18986, A	488	27	56.2	484	9	US-10-467-657-9472	Sequence 5472, Ap
416	299	11	US-11-188-298-8972	Sequence 8972, Ap	489	27	56.2	484	9	US-10-763-712A-12	Sequence 12, Appl
417	300	11	US-11-188-298-5214	Sequence 5214, Ap	490	27	56.2	494	11	US-11-188-298-573	Sequence 573, Ap
418	300	11	US-11-188-298-18052	Sequence 18052, A	491	27	56.2	504	11	US-11-188-298-17474	Sequence 17474, A
419	306	11	US-11-188-298-1254	Sequence 1254, Ap	492	27	56.2	507	11	US-11-079-483-8754	Sequence 8754, Ap
420	307	11	US-11-096-568A-19424	Sequence 19424, A	493	27	56.2	509	11	US-11-096-568A-3134	Sequence 3134, Ap
421	314	11	US-11-096-568A-23462	Sequence 23462, A	494	27	56.2	511	11	US-11-188-298-13117	Sequence 13117, A
422	314	11	US-11-188-298-8427	Sequence 8427, A	495	27	56.2	516	11	US-11-072-512-3813	Sequence 3813, Ap
423	322	11	US-11-188-298-21904	Sequence 21904, A	496	27	56.2	516	11	US-11-052-554A-355	Sequence 355, App
424	324	11	US-11-188-298-362	Sequence 362, App	497	27	56.2	518	11	US-11-052-554A-355	Sequence 18655, A
425	329	11	US-11-188-298-4741	Sequence 4741, Ap	498	27	56.2	525	11	US-11-096-568A-24058	Sequence 24058, A
426	332	11	US-11-082-389-126	Sequence 126, App	499	27	56.2	525	11	US-11-096-568A-1516	Sequence 1516, Ap
427	334	11	US-11-096-568A-24102	Sequence 24102, A	500	27	56.2	527	11	US-11-096-568A-24057	Sequence 24057, A
428	336	11	US-11-096-568A-13596	Sequence 13596, A	501	27	56.2	527	11	US-11-096-568A-26860	Sequence 26860, A
429	337	11	US-11-188-298-18318	Sequence 18318, A	502	27	56.2	528	11	US-11-188-298-11602	Sequence 11602, A
430	337	11	US-11-188-298-20050	Sequence 20050, A	503	27	56.2	528	11	US-11-188-298-13923	Sequence 13923, A
431	337	11	US-11-188-298-20496	Sequence 20496, A	504	27	56.2	528	11	US-11-188-298-9192	Sequence 9192, Ap
432	338	9	US-10-467-657-3178	Sequence 3178, Ap	505	27	56.2	529	11	US-11-079-483-9686	Sequence 9686, Ap
433	338	11	US-11-188-298-6320	Sequence 6320, Ap	506	27	56.2	540	11	US-11-188-298-3912	Sequence 3912, Ap
434	338	11	US-11-188-298-8080	Sequence 8080, Ap	507	27	56.2	541	11	US-11-199-544-32	Sequence 32, Appl
435	338	11	US-11-188-298-10536	Sequence 10536, A	508	27	56.2	556	11	US-11-154-827-98	Sequence 98, Appl
436	338	11	US-11-188-298-13329	Sequence 13329, A	509	27	56.2	566	11	US-11-096-568A-24056	Sequence 24056, A
437	338	11	US-11-188-298-13782	Sequence 13782, A	510	27	56.2	571	11	US-11-188-298-120583	Sequence 20583, A
438	338	11	US-11-188-298-13951	Sequence 13951, A	511	27	56.2	574	9	US-10-507-275-7	Sequence 7, Appl1
439	338	11	US-11-188-298-14254	Sequence 14254, A	512	27	56.2	574	9	US-10-770-726-70	Sequence 50, Appl
440	338	11	US-11-188-298-15408	Sequence 15408, A	513	27	56.2	577	11	US-11-096-568A-1515	Sequence 1515, Ap
441	338	11	US-11-188-298-16894	Sequence 16894, A	514	27	56.2	592	10	US-11-301-554A-1809	Sequence 1809, Ap
442	338	11	US-11-188-298-18267	Sequence 18267, A	515	27	56.2	592	11	US-11-059-292A-10	Sequence 10, Appl
443	338	11	US-11-188-298-18443	Sequence 18443, A	516	27	56.2	593	11	US-11-188-298-11982	Sequence 11982, A
444	340	11	US-11-188-298-8037	Sequence 8037, Ap	517	27	56.2	593	11	US-11-188-298-14123	Sequence 14123, A
445	340	11	US-11-188-298-8037	Sequence 8037, Ap	518	27	56.2	593	11	US-11-188-298-18740	Sequence 18740, A
446	342	11	US-11-087-099-4826	Sequence 4826, Ap	519	27	56.2	594	11	US-11-188-298-18849	Sequence 18849, A
447	342	11	US-11-087-099-5105	Sequence 5105, Ap	520	27	56.2	595	11	US-11-188-298-18101	Sequence 18101, A
448	343	11	US-11-087-099-11751	Sequence 11751, A	521	27	56.2	595	11	US-11-188-298-14067	Sequence 14067, A
449	346	11	US-11-188-298-13573	Sequence 13573, A	522	27	56.2	600	11	US-11-188-298-14067	Sequence 14067, A
450	351	11	US-11-188-298-18372	Sequence 18372, A	523	27	56.2	602	11	US-11-087-099-11582	Sequence 11582, A
451	357	11	US-11-096-568A-20506	Sequence 20506, A	524	27	56.2	616	11	US-11-087-099-8299	Sequence 8299, Ap
452	357	11	US-11-188-298-1663	Sequence 1663, Ap	525	27	56.2	620	11	US-11-087-099-12402	Sequence 12402, A
453	359	11	US-11-087-099-2127	Sequence 2127, Ap	526	27	56.2	642	11	US-11-188-298-15288	Sequence 15288, A
454	359	11	US-11-188-298-5814	Sequence 5814, Ap	527	27	56.2	642	11	US-11-096-568A-29172	Sequence 29172, A
455	364	11	US-11-096-568A-3793	Sequence 3793, Ap	528	27	56.2	688	11	US-11-113-424-45	Sequence 45, Appl
456	374	11	US-11-188-298-17381	Sequence 17381, A	529	27	56.2	688	11	US-11-113-424-45	Sequence 45, Appl
457	377	11	US-11-096-568A-16578	Sequence 16578, A	530	27	56.2	688	11	US-11-040-218-25	Sequence 25, Appl
458	389	11	US-11-129-143-82	Sequence 82, Appl	531	27	56.2	694	11	US-11-096-568A-26859	Sequence 26859, A
459	395	8	US-10-511-937-2599	Sequence 2599, Ap	532	27	56.2	694	11	US-11-096-568A-26859	Sequence 26859, A

533	27	56.2	719	11	US-11-096-568A-29171	Sequence 29171, A	606	26	54.2	233	11	US-11-045-004-403	Sequence 403, App
534	27	56.2	726	11	US-11-079-463-8208	Sequence 8208, Ap	607	26	54.2	235	11	US-11-100-183-24	Sequence 24, App1
535	27	56.2	731	11	US-11-079-463-1170	Sequence 1170, Ap	608	26	54.2	236	11	US-11-224-071-16	Sequence 16, App1
536	27	56.2	747	9	US-10-501-035-224	Sequence 224, App	609	26	54.2	237	11	US-11-188-298-11731	Sequence 11731, A
537	27	56.2	824	11	US-11-096-568A-26858	Sequence 26858, A	610	26	54.2	238	9	US-10-793-626-20	Sequence 20, App1
538	27	56.2	840	11	US-11-079-463-9922	Sequence 9922, Ap	611	26	54.2	238	11	US-11-079-463-8525	Sequence 8525, Ap
539	27	56.2	906	8	US-10-505-928-426	Sequence 426, App	612	26	54.2	240	11	US-11-096-568A-15963	Sequence 16963, A
540	27	56.2	906	11	US-11-087-039-11020	Sequence 11020, A	613	26	54.2	240	11	US-11-096-568A-130977	Sequence 130977, A
541	27	56.2	1068	9	US-10-902-137-8	Sequence 8, App1	614	26	54.2	241	11	US-11-096-568A-6296	Sequence 6296, Ap
542	27	56.2	1114	9	US-10-469-469-277	Sequence 277, App	615	26	54.2	241	11	US-11-096-568A-30976	Sequence 30976, A
543	27	56.2	1126	11	US-11-079-463-8562	Sequence 8562, Ap	616	26	54.2	246	11	US-11-130-935-1	Sequence 1, App1
544	27	56.2	1168	9	US-10-970-750-5	Sequence 5, App1	617	26	54.2	248	11	US-11-188-298-17903	Sequence 17907, Ap
545	27	56.2	1216	9	US-10-873-528-12	Sequence 12, App1	618	26	54.2	248	11	US-11-188-298-2977	Sequence 1032, Ap
546	27	56.2	1235	11	US-11-045-004-1385	Sequence 1385, Ap	619	26	54.2	252	9	US-10-793-626-1032	Sequence 1032, App1
547	27	56.2	1464	9	US-10-912-971-4	Sequence 4, App1	620	26	54.2	256	11	US-11-188-298-15238	Sequence 15238, A
548	27	56.2	1464	11	US-11-124-367A-262	Sequence 262, App	621	26	54.2	257	11	US-11-188-298-4937	Sequence 4937, Ap
549	27	56.2	1504	8	US-10-505-928-662	Sequence 662, App	622	26	54.2	258	11	US-11-096-568A-23353	Sequence 23353, A
550	27	56.2	1652	9	US-10-995-561-663	Sequence 663, App	623	26	54.2	261	11	US-11-096-568A-130975	Sequence 130975, A
551	27	56.2	1912	8	US-10-511-937-2561	Sequence 2561, Ap	624	26	54.2	262	11	US-11-096-568A-16648	Sequence 16648, A
552	27	56.2	1938	9	US-10-995-561-661	Sequence 661, App	625	26	54.2	264	11	US-11-079-463-6112	Sequence 6112, Ap
553	27	56.2	1938	9	US-10-995-561-662	Sequence 662, App	626	26	54.2	270	11	US-11-079-463-6112	Sequence 6112, Ap
554	27	56.2	1954	9	US-10-995-561-660	Sequence 660, App	627	26	54.2	272	11	US-11-087-099-7876	Sequence 7876, Ap
555	27	56.2	1972	9	US-10-995-561-664	Sequence 664, App	628	26	54.2	273	8	US-10-511-814-1	Sequence 1, App1
556	27	56.2	1972	9	US-10-995-561-666	Sequence 666, App	629	26	54.2	273	11	US-11-096-568A-10838	Sequence 10838, A
557	27	56.2	2281	9	US-10-453-772-166	Sequence 166, App	630	26	54.2	274	11	US-11-188-298-11710	Sequence 11710, A
558	27	56.2	2281	9	US-10-453-772-172	Sequence 172, App	631	26	54.2	275	11	US-11-079-463-10403	Sequence 10403, A
559	27	56.2	2299	9	US-10-455-772-168	Sequence 168, App	632	26	54.2	280	11	US-11-188-298-15766	Sequence 15766, A
560	27	56.2	2300	9	US-10-455-772-178	Sequence 178, App	633	26	54.2	282	11	US-11-096-568A-14679	Sequence 14679, A
561	27	56.2	2571	8	US-10-505-928-784	Sequence 784, App	634	26	54.2	290	11	US-11-096-568A-23352	Sequence 23352, A
562	27	56.2	2571	9	US-10-876-787-6	Sequence 6, App1	635	26	54.2	290	11	US-11-188-298-15162	Sequence 15162, A
563	27	56.2	8746	11	US-11-098-686-10232	Sequence 10232, A	636	26	54.2	291	9	US-10-793-626-740	Sequence 740, App
564	26.5	55.2	186	11	US-11-080-248-2	Sequence 2, App1	637	26	54.2	291	11	US-11-188-298-15220	Sequence 15220, A
565	26.5	55.2	243	11	US-11-240-406-3	Sequence 3, App1	638	26	54.2	292	11	US-11-188-298-5275	Sequence 5275, Ap
566	26.5	55.2	289	11	US-11-240-406-2	Sequence 2, App1	639	26	54.2	294	11	US-11-024-559-265	Sequence 2609, Ap
567	26.5	55.2	337	11	US-11-045-004-1271	Sequence 1271, Ap	640	26	54.2	294	11	US-11-188-298-2009	Sequence 5789, Ap
568	26.5	55.2	3685	11	US-11-055-497A-8	Sequence 8, App1	641	26	54.2	294	11	US-11-188-298-8365	Sequence 8365, Ap
569	26	54.2	13	9	US-10-511-559-167	Sequence 167, App	642	26	54.2	294	11	US-11-188-298-8529	Sequence 8529, Ap
570	26	54.2	13	9	US-10-511-559-168	Sequence 168, App	643	26	54.2	294	11	US-11-188-298-8968	Sequence 8968, Ap
571	26	54.2	62	11	US-11-096-568A-13844	Sequence 13844, A	644	26	54.2	294	11	US-11-188-298-10716	Sequence 10716, A
572	26	54.2	62	11	US-11-096-568A-27335	Sequence 27335, A	645	26	54.2	294	11	US-11-188-298-15947	Sequence 15947, A
573	26	54.2	85	11	US-11-087-099-924	Sequence 924, App	646	26	54.2	294	11	US-11-188-298-17053	Sequence 17053, A
574	26	54.2	85	9	US-10-475-075-840	Sequence 840, App	647	26	54.2	294	11	US-11-188-298-19359	Sequence 19359, A
575	26	54.2	90	8	US-10-505-928-586	Sequence 586, App	648	26	54.2	294	11	US-11-188-298-19764	Sequence 19764, A
576	26	54.2	92	11	US-11-087-099-11081	Sequence 11081, A	649	26	54.2	294	11	US-11-188-298-21121	Sequence 21121, A
577	26	54.2	92	11	US-11-096-568A-8700	Sequence 8700, Ap	650	26	54.2	294	11	US-11-188-298-21144	Sequence 21144, A
578	26	54.2	94	11	US-11-144-947-505	Sequence 505, App	651	26	54.2	294	11	US-11-188-298-22331	Sequence 22331, A
579	26	54.2	96	9	US-10-485-788A-710	Sequence 710, App	652	26	54.2	298	11	US-11-037-243-107	Sequence 107, App
580	26	54.2	96	11	US-11-053-076-80	Sequence 80, App1	653	26	54.2	298	11	US-10-194-487-132	Sequence 132, App
581	26	54.2	96	11	US-11-079-463-6618	Sequence 6618, Ap	654	26	54.2	300	9	US-10-195-883-132	Sequence 132, App
582	26	54.2	104	11	US-11-096-568A-27333	Sequence 27333, A	655	26	54.2	300	9	US-10-195-888-132	Sequence 132, App
583	26	54.2	117	11	US-11-098-686-10378	Sequence 10378, A	656	26	54.2	300	9	US-10-195-889-132	Sequence 132, App
584	26	54.2	128	9	US-10-793-626-1338	Sequence 1338, Ap	657	26	54.2	302	11	US-10-216-161A-164	Sequence 464, App
585	26	54.2	149	11	US-11-264-096-1307	Sequence 1307, Ap	658	26	54.2	302	11	US-11-188-298-1682	Sequence 3682, Ap
586	26	54.2	156	11	US-11-079-463-5578	Sequence 5578, Ap	659	26	54.2	302	11	US-11-188-298-11022	Sequence 11022, A
587	26	54.2	162	11	US-11-188-298-8839	Sequence 8839, Ap	660	26	54.2	302	11	US-11-188-298-11026	Sequence 20276, A
588	26	54.2	165	11	US-11-045-004-764	Sequence 764, App	661	26	54.2	304	11	US-11-188-298-20262	Sequence 9211, Ap
589	26	54.2	165	11	US-11-045-004-2675	Sequence 2675, Ap	662	26	54.2	306	9	US-11-188-298-2211	Sequence 9211, Ap
590	26	54.2	166	11	US-11-079-463-5648	Sequence 5648, Ap	663	26	54.2	307	11	US-10-467-657-1318	Sequence 1318, Ap
591	26	54.2	169	11	US-11-096-568A-8493	Sequence 8493, Ap	664	26	54.2	307	11	US-11-188-298-3377	Sequence 3377, Ap
592	26	54.2	172	11	US-11-096-568A-16964	Sequence 16964, A	665	26	54.2	308	11	US-11-079-463-6585	Sequence 6585, Ap
593	26	54.2	184	11	US-11-096-568A-8492	Sequence 8492, Ap	666	26	54.2	311	11	US-11-096-568A-11474	Sequence 11474, A
594	26	54.2	185	11	US-11-096-568A-14880	Sequence 14880, A	667	26	54.2	313	11	US-11-096-568A-6295	Sequence 6295, Ap
595	26	54.2	193	11	US-11-096-568A-10840	Sequence 10840, A	668	26	54.2	313	11	US-11-188-298-17086	Sequence 17086, Ap
596	26	54.2	193	11	US-11-079-463-8380	Sequence 8380, Ap	669	26	54.2	316	11	US-11-096-568A-31551	Sequence 31551, A
597	26	54.2	203	9	US-10-506-454-801	Sequence 801, App	670	26	54.2	319	11	US-11-109-156-38	Sequence 38, App1
598	26	54.2	204	9	US-10-506-454-1222	Sequence 1222, Ap	671	26	54.2	320	11	US-11-079-463-8013	Sequence 8013, Ap
599	26	54.2	206	9	US-10-506-454-1454	Sequence 1454, Ap	672	26	54.2	323	9	US-10-878-556A-184	Sequence 184, App1
600	26	54.2	208	9	US-10-793-626-1404	Sequence 1404, Ap	673	26	54.2	323	11	US-11-109-156-37	Sequence 37, App1
601	26	54.2	214	11	US-11-079-463-6302	Sequence 6302, Ap	674	26	54.2	323	11	US-11-096-568A-31550	Sequence 31550, A
602	26	54.2	216	9	US-10-821-234-1033	Sequence 1033, Ap	675	26	54.2	326	11	US-11-188-298-13867	Sequence 13867, A
603	26	54.2	222	11	US-11-156-084-96	Sequence 96, App1	676	26	54.2	329	11	US-10-793-626-1260	Sequence 1260, Ap
604	26	54.2	222	11	US-11-096-568A-10839	Sequence 10839, A	677	26	54.2	329	11	US-11-156-084-28	Sequence 28, App1
605	26	54.2	231	9	US-10-455-772-1124	Sequence 1124, Ap	678	26	54.2	329	11	US-11-156-084-46	Sequence 46, App1

679	54.2	329	11	US-11-156-084-171	Sequence 171, App	752	26	54.2	427	9	US-10-506-454-787	Sequence 787, App
680	26	329	11	US-11-156-084-243	Sequence 243, App	753	26	54.2	427	11	US-11-096-568A-1129	Sequence 1129, App
681	54.2	329	11	US-11-228-659-37	Sequence 37, Appl	754	26	54.2	428	9	US-10-793-626-7050	Sequence 2050, App
682	54.2	331	11	US-11-188-298-15741	Sequence 15741, A	755	26	54.2	429	9	US-10-967-457-74	Sequence 74, Appl
683	26	332	11	US-11-156-084-293	Sequence 293, App	756	26	54.2	429	9	US-10-921-793-28	Sequence 28, Appl
684	54.2	334	11	US-11-096-568A-6294	Sequence 6294, App	757	26	54.2	429	9	US-10-931-198-28	Sequence 28, Appl
685	26	335	11	US-11-087-039-267	Sequence 267, App	758	26	54.2	429	9	US-10-942-042-28	Sequence 28, Appl
686	54.2	336	11	US-11-096-568A-14878	Sequence 14878, A	759	26	54.2	429	11	US-11-000-463-302	Sequence 302, App
687	26	337	11	US-11-102-457-5	Sequence 5, Appl	760	26	54.2	429	11	US-11-000-463-774	Sequence 774, App
688	26	337	11	US-11-102-457-12	Sequence 12, Appl	761	26	54.2	432	11	US-10-992-577-2	Sequence 2, Appl
689	54.2	340	11	US-11-188-298-2839	Sequence 2839, App	762	26	54.2	432	11	US-11-223-294-37	Sequence 37, Appl
690	54.2	341	11	US-11-098-686-11432	Sequence 11432, A	763	26	54.2	434	11	US-11-096-568A-4749	Sequence 4749, App
691	26	341	11	US-11-087-039-3768	Sequence 3768, App	764	26	54.2	435	9	US-10-467-657-5694	Sequence 5694, App
692	26	345	11	US-11-087-039-7803	Sequence 7803, App	765	26	54.2	435	11	US-11-096-568A-31780	Sequence 31780, A
693	54.2	345	11	US-11-087-039-8433	Sequence 8433, App	766	26	54.2	437	8	US-10-504-120-12	Sequence 32, Appl
694	26	346	11	US-11-087-039-4433	Sequence 4433, App	767	26	54.2	437	11	US-11-096-568A-17555	Sequence 17555, A
695	54.2	348	11	US-11-087-039-5608	Sequence 5608, App	768	26	54.2	439	8	US-10-370-959-64	Sequence 64, Appl
696	26	348	11	US-11-087-039-5780	Sequence 5780, App	769	26	54.2	441	11	US-11-079-463-9619	Sequence 9619, App
697	54.2	348	11	US-11-087-039-7924	Sequence 7924, App	770	26	54.2	449	11	US-11-098-686-10535	Sequence 10535, A
698	26	348	11	US-11-096-568A-11473	Sequence 11473, A	771	26	54.2	452	9	US-10-506-454-444	Sequence 444, App
699	26	348	11	US-11-188-298-7313	Sequence 7313, App	772	26	54.2	452	11	US-11-087-039-10811	Sequence 10811, A
700	54.2	349	9	US-10-506-454-1611	Sequence 1611, App	773	26	54.2	452	11	US-11-096-568A-4748	Sequence 4748, App
701	26	349	11	US-11-087-039-4763	Sequence 4763, App	774	26	54.2	454	11	US-11-096-568A-27573	Sequence 27573, A
702	26	350	11	US-11-087-039-4829	Sequence 4829, App	775	26	54.2	456	11	US-11-069-642-15	Sequence 15, Appl
703	26	350	11	US-11-087-039-5151	Sequence 5151, App	776	26	54.2	458	11	US-11-079-463-6601	Sequence 6601, App
704	26	350	11	US-11-087-039-7980	Sequence 7980, App	777	26	54.2	462	11	US-11-087-039-8611	Sequence 8611, App
705	26	353	11	US-11-188-298-11146	Sequence 11146, A	778	26	54.2	464	11	US-11-096-568A-4747	Sequence 4747, App
706	54.2	353	11	US-11-096-568A-28194	Sequence 28194, A	779	26	54.2	469	11	US-11-188-298-2103	Sequence 2103, App
707	26	359	11	US-11-096-568A-21778	Sequence 21778, A	780	26	54.2	476	11	US-11-079-463-9043	Sequence 9043, App
708	54.2	360	11	US-11-264-096-1308	Sequence 1308, App	781	26	54.2	477	11	US-11-087-039-3571	Sequence 3571, App
709	26	363	11	US-11-087-039-9277	Sequence 9277, App	782	26	54.2	479	11	US-11-188-298-11467	Sequence 11467, A
710	26	363	11	US-11-087-039-10010	Sequence 10010, A	783	26	54.2	479	11	US-11-188-298-14281	Sequence 14281, A
711	26	366	11	US-11-087-039-10562	Sequence 10562, A	784	26	54.2	479	11	US-11-188-298-14602	Sequence 14602, A
712	26	366	11	US-11-096-568A-29379	Sequence 29379, A	785	26	54.2	479	11	US-11-188-298-16615	Sequence 16615, A
713	26	366	11	US-11-096-568A-30167	Sequence 30167, A	786	26	54.2	498	11	US-11-188-298-19769	Sequence 19769, A
714	26	370	9	US-10-821-234-1502	Sequence 1502, App	787	26	54.2	500	9	US-11-087-039-11253	Sequence 11253, A
715	26	370	11	US-11-096-568A-21777	Sequence 21777, A	788	26	54.2	509	11	US-10-784-004-196	Sequence 396, App
716	26	372	11	US-11-096-568A-31549	Sequence 31549, A	789	26	54.2	508	9	US-11-096-568A-28192	Sequence 28192, A
717	26	373	11	US-11-096-568A-29378	Sequence 29378, A	790	26	54.2	512	11	US-10-873-528-102	Sequence 102, App
718	26	373	11	US-11-096-568A-30166	Sequence 30166, A	791	26	54.2	512	11	US-11-169-041-178	Sequence 178, App
719	54.2	374	11	US-11-097-728-4	Sequence 4, Appl	792	26	54.2	521	11	US-11-188-298-7406	Sequence 7406, App
720	26	374	11	US-11-188-298-10826	Sequence 10826, A	793	26	54.2	521	11	US-11-188-298-6283	Sequence 6283, App
721	26	378	11	US-11-188-298-15257	Sequence 15257, A	794	26	54.2	534	9	US-10-784-004-1215	Sequence 1215, App
722	26	379	11	US-11-185-033-4	Sequence 4, Appl	795	26	54.2	551	11	US-11-087-039-8478	Sequence 8478, App
723	26	380	9	US-10-793-626-702	Sequence 702, App	796	26	54.2	555	11	US-11-045-004-1565	Sequence 1565, App
724	26	382	11	US-11-185-033-33	Sequence 33, Appl	797	26	54.2	559	11	US-11-096-568A-27572	Sequence 27572, A
725	26	382	11	US-11-087-039-11266	Sequence 11266, A	798	26	54.2	567	11	US-11-096-568A-1128	Sequence 1128, App
726	26	392	26	US-10-498-026-90	Sequence 90, Appl	799	26	54.2	574	11	US-11-188-298-18570	Sequence 18570, A
727	26	395	11	US-11-124-367A-287	Sequence 287, App	800	26	54.2	576	11	US-11-098-686-10763	Sequence 10763, A
728	26	395	11	US-11-124-367A-288	Sequence 288, App	801	26	54.2	578	11	US-11-188-298-20381	Sequence 20381, A
729	26	395	11	US-11-188-298-16610	Sequence 16610, A	802	26	54.2	589	11	US-11-096-568A-1127	Sequence 1127, App
730	26	396	8	US-10-496-399-1	Sequence 1, Appl	803	26	54.2	612	11	US-11-079-463-9127	Sequence 9127, App
731	26	396	9	US-10-921-793-6	Sequence 6, Appl	804	26	54.2	614	9	US-10-714-995-10	Sequence 10, Appl
732	26	396	9	US-10-501-033-204	Sequence 204, App	805	26	54.2	617	9	US-10-878-556A-67	Sequence 67, Appl
733	26	396	9	US-10-931-198-6	Sequence 6, Appl	806	26	54.2	625	11	US-11-188-298-19611	Sequence 19611, A
734	26	396	9	US-10-942-042-6	Sequence 6, Appl	807	26	54.2	632	11	US-11-079-463-5795	Sequence 5795, App
735	26	396	11	US-11-051-358-5	Sequence 5, Appl	808	26	54.2	671	11	US-11-096-568A-30146	Sequence 30146, A
736	26	396	11	US-11-185-033-2	Sequence 2, Appl	809	26	54.2	676	11	US-11-045-004-435	Sequence 435, App
737	26	396	11	US-11-185-033-5	Sequence 5, Appl	810	26	54.2	681	11	US-11-096-568A-30145	Sequence 30145, App
738	26	396	11	US-11-185-033-7	Sequence 7, Appl	811	26	54.2	688	11	US-11-113-424-48	Sequence 48, Appl
739	26	399	11	US-11-096-568A-28193	Sequence 28193, A	812	26	54.2	688	11	US-11-040-118-27	Sequence 27, Appl
740	26	399	11	US-11-096-568A-31782	Sequence 31782, A	813	26	54.2	698	11	US-11-119-659-2	Sequence 2, Appl
741	26	400	11	US-11-096-568A-17557	Sequence 17557, A	814	26	54.2	703	11	US-11-119-659-19	Sequence 19, Appl
742	26	400	11	US-11-096-568A-31781	Sequence 31781, A	815	26	54.2	717	9	US-10-793-626-1022	Sequence 3022, App
743	26	405	11	US-11-096-568A-17556	Sequence 17556, A	816	26	54.2	731	11	US-11-188-298-9427	Sequence 9427, App
744	26	408	11	US-11-096-568A-21776	Sequence 21776, A	817	26	54.2	731	11	US-11-188-298-22532	Sequence 22532, A
745	26	410	11	US-11-188-298-372	Sequence 372, App	818	26	54.2	735	9	US-10-505-263-89	Sequence 89, Appl
746	26	411	9	US-10-793-626-3156	Sequence 3156, App	819	26	54.2	736	11	US-11-053-100-45	Sequence 23, Appl
747	26	414	11	US-11-087-039-8301	Sequence 8301, App	820	26	54.2	738	9	US-10-880-861-23	Sequence 23, Appl
748	26	418	11	US-11-188-298-6616	Sequence 6616, App	821	26	54.2	742	11	US-11-188-298-15750	Sequence 15750, A
749	26	422	11	US-11-096-568A-29377	Sequence 29377, A	822	26	54.2	749	11	US-11-096-568A-30144	Sequence 30144, A
750	26	422	11	US-11-096-568A-30165	Sequence 30165, A	823	26	54.2	770	11	US-11-079-463-8700	Sequence 8700, App
751	26	425	11	US-11-096-568A-27574	Sequence 27574, A	824	26	54.2	770	11		

835	26	54.2	771	9	US-10-467-657-5562	Sequence 5562, Ap	898	25	52.1	110	9	US-10-614-599-11	Sequence 11, Appl
826	26	54.2	786	11	US-11-072-512-2944	Sequence 2944, Ap	889	25	52.1	113	11	US-11-096-568A-25100	Sequence 25100, A
827	26	54.2	801	11	US-11-174-150-29	Sequence 29, Appl	900	25	52.1	114	9	US-10-821-234-1637	Sequence 1637, Ap
828	26	54.2	801	11	US-11-124-368A-292	Sequence 292, App	901	25	52.1	114	11	US-11-189-120-3	Sequence 3, Appl1
829	26	54.2	811	11	US-11-188-298-19556	Sequence 19556, A	902	25	52.1	114	11	US-11-177-506-30	Sequence 30, Appl1
830	26	54.2	879	11	US-11-168-298-11926	Sequence 21926, A	903	25	52.1	114	11	US-11-223-992-16	Sequence 12, Appl1
831	26	54.2	891	11	US-11-188-298-1187	Sequence 1187, Ap	904	25	52.1	119	11	US-11-172-740-369	Sequence 369, App
832	26	54.2	902	11	US-11-188-298-12010	Sequence 12010, Ap	905	25	52.1	120	11	US-11-000-463-725	Sequence 725, App
833	26	54.2	902	11	US-11-188-298-11634	Sequence 21634, A	906	25	52.1	124	9	US-10-763-712A-8	Sequence 8, Appl1
834	26	54.2	905	11	US-11-079-463-9074	Sequence 9074, Ap	907	25	52.1	134	9	US-10-467-657-5784	Sequence 7574, Ap
835	26	54.2	928	11	US-11-087-099-5001	Sequence 5001, Ap	908	25	52.1	134	9	US-10-467-657-7464	Sequence 687, Ap
836	26	54.2	928	11	US-11-188-298-15606	Sequence 15606, A	909	25	52.1	134	9	US-10-467-657-6387	Sequence 7376, Ap
837	26	54.2	937	11	US-11-096-568A-29893	Sequence 29893, A	910	25	52.1	138	11	US-11-079-463-8678	Sequence 8678, Ap
838	26	54.2	941	9	US-10-501-035-343	Sequence 343, App	911	25	52.1	138	11	US-11-079-463-8678	Sequence 8678, Ap
839	26	54.2	962	9	US-11-083-807A-51	Sequence 51, Appl	912	25	52.1	141	11	US-11-072-512-3537	Sequence 8, Appl1
840	26	54.2	985	11	US-11-096-568A-29892	Sequence 29892, A	913	25	52.1	141	11	US-11-072-512-3537	Sequence 8, Appl1
841	26	54.2	989	11	US-11-096-568A-29891	Sequence 29891, A	914	25	52.1	143	11	US-11-096-568A-25099	Sequence 25099, A
842	26	54.2	1000	9	US-10-455-772-274	Sequence 274, App	915	25	52.1	148	11	US-11-096-568A-14957	Sequence 14957, A
843	26	54.2	1018	9	US-10-455-772-272	Sequence 272, App	916	25	52.1	148	11	US-11-264-096-2048	Sequence 2048, Ap
844	26	54.2	1019	9	US-10-455-772-1120	Sequence 1120, Ap	917	25	52.1	153	9	US-10-467-657-8418	Sequence 26, Appl
845	26	54.2	1033	11	US-11-087-099-8833	Sequence 8833, Ap	918	25	52.1	158	9	US-10-530-253-76	Sequence 5484, Ap
846	26	54.2	1078	11	US-11-165-211-43	Sequence 43, Appl1	919	25	52.1	161	9	US-10-467-657-5484	Sequence 22734, A
847	26	54.2	1078	11	US-11-165-226-53	Sequence 53, Appl1	920	25	52.1	165	11	US-11-096-568A-22734	Sequence 1366, Ap
848	26	54.2	1135	11	US-11-087-099-8583	Sequence 2568, Ap	921	25	52.1	166	9	US-11-096-568A-1396	Sequence 5552, Ap
849	26	54.2	1135	11	US-11-087-099-8583	Sequence 8583, Ap	922	25	52.1	166	9	US-10-793-656-1266	Sequence 1266, Ap
850	26	54.2	1139	11	US-11-087-099-3294	Sequence 3294, Ap	923	25	52.1	172	9	US-10-793-656-1266	Sequence 3649, Ap
851	26	54.2	1184	9	US-10-131-826A-394	Sequence 394, App	924	25	52.1	174	11	US-11-188-298-3649	Sequence 3649, Ap
852	26	54.2	1184	9	US-10-973-115B-394	Sequence 394, App	925	25	52.1	175	11	US-11-087-099-3781	Sequence 7104, Ap
853	26	54.2	1184	9	US-10-16-161A-425	Sequence 425, App	926	25	52.1	175	11	US-11-096-568A-7104	Sequence 17815, A
854	26	54.2	1184	9	US-10-137-873A-394	Sequence 394, App	927	25	52.1	176	11	US-11-188-298-17815	Sequence 11799, A
855	26	54.2	1184	9	US-10-132-370-394	Sequence 394, App	928	25	52.1	179	11	US-11-188-298-11799	Sequence 51, Appl1
856	26	54.2	1184	11	US-11-290-153-394	Sequence 394, App	929	25	52.1	184	11	US-11-100-183-51	Sequence 25098, A
857	26	54.2	1186	11	US-11-053-100-46	Sequence 46, Appl	930	25	52.1	184	11	US-11-096-568A-25098	Sequence 33564, A
858	26	54.2	1187	11	US-11-043-889-46	Sequence 46, Appl	931	25	52.1	184	11	US-11-096-568A-33564	Sequence 14862, A
859	26	54.2	1208	9	US-10-330-773-810	Sequence 810, App	932	25	52.1	186	11	US-11-188-298-17766	Sequence 17766, Ap
860	26	54.2	1228	11	US-11-188-298-2731	Sequence 2731, Ap	933	25	52.1	186	11	US-11-100-183-13	Sequence 21350, A
861	26	54.2	1294	11	US-11-079-463-7534	Sequence 7534, Ap	934	25	52.1	187	11	US-11-188-298-13350	Sequence 11087, A
862	26	54.2	1438	9	US-10-511-559-73	Sequence 73, Appl	935	25	52.1	187	11	US-11-188-298-13350	Sequence 1484, Ap
863	26	54.2	1637	9	US-10-821-234-1204	Sequence 1204, Ap	936	25	52.1	190	11	US-11-045-004-1494	Sequence 1734, Ap
864	26	54.2	2096	9	US-10-995-561-606	Sequence 606, App	937	25	52.1	190	11	US-11-188-298-11087	Sequence 1735, Ap
865	26	54.2	2314	11	US-11-097-728-2	Sequence 2, Appl1	938	25	52.1	191	11	US-11-172-740-1735	Sequence 1388, Ap
866	26	54.2	2331	9	US-10-793-626-760	Sequence 760, App	939	25	52.1	191	11	US-11-188-298-1388	Sequence 4153, Ap
867	26	54.2	2331	9	US-10-995-561-608	Sequence 608, App	940	25	52.1	191	11	US-11-045-004-2495	Sequence 22195, A
868	26	54.2	2351	10	US-11-183-218-30	Sequence 30, Appl	941	25	52.1	191	11	US-11-188-298-1388	Sequence 2495, Ap
869	26	54.2	2351	11	US-11-183-205-30	Sequence 30, Appl	942	25	52.1	193	11	US-11-096-568A-29129	Sequence 22195, A
870	26	54.2	2351	11	US-11-244-087-3	Sequence 3, Appl1	943	25	52.1	196	11	US-11-096-568A-22195	Sequence 4676, Ap
871	26	54.2	2351	11	US-11-267-631-49	Sequence 49, Appl1	944	25	52.1	199	11	US-11-096-568A-30491	Sequence 2495, Ap
872	26	54.2	2351	11	US-11-097-728-6	Sequence 6, Appl1	945	25	52.1	199	11	US-11-096-568A-4676	Sequence 2495, Ap
873	26	54.2	4386	11	US-11-004-399-714	Sequence 714, App	946	25	52.1	201	11	US-11-045-004-2495	Sequence 10800, A
874	26	54.2	5291	11	US-11-052-554A-281	Sequence 281, App	947	25	52.1	203	11	US-11-188-298-10800	Sequence 18411, A
875	26	54.2	5291	11	US-11-188-298-17908	Sequence 17908, A	948	25	52.1	204	11	US-11-188-298-18411	Sequence 19211, A
25.5	25	52.1	817	11	US-11-254-419-131	Sequence 131, App	949	25	52.1	204	11	US-11-096-568A-19211	Sequence 2705, Ap
876	25	52.1	12	11	US-11-254-419-131	Sequence 133, App	950	25	52.1	206	11	US-11-045-004-2705	Sequence 1008, Ap
877	25	52.1	12	11	US-11-054-515-2308	Sequence 2308, Ap	951	25	52.1	207	11	US-11-172-740-1008	Sequence 828, App
878	25	52.1	16	11	US-11-054-515-2309	Sequence 2309, Ap	952	25	52.1	211	11	US-10-793-626-828	Sequence 22, Appl
879	25	52.1	16	11	US-11-054-515-2309	Sequence 2309, Ap	953	25	52.1	215	9	US-11-188-298-2403	Sequence 2403, Ap
880	25	52.1	16	11	US-11-266-444-2308	Sequence 2308, Ap	954	25	52.1	215	11	US-11-045-004-1793	Sequence 1793, Ap
881	25	52.1	16	11	US-11-266-444-2309	Sequence 2309, Ap	955	25	52.1	215	11	US-11-188-298-3609	Sequence 3609, Ap
882	25	52.1	18	11	US-11-054-515-2822	Sequence 2822, Ap	956	25	52.1	215	11	US-11-096-568A-33221	Sequence 33221, A
883	25	52.1	18	11	US-11-266-444-2822	Sequence 2822, Ap	957	25	52.1	218	11	US-11-096-568A-8281	Sequence 8281, Ap
884	25	52.1	39	11	US-11-096-568A-7894	Sequence 7894, Ap	958	25	52.1	218	11	US-11-096-568A-8281	Sequence 8281, Ap
885	25	52.1	47	9	US-10-916-827-21	Sequence 21, Appl	959	25	52.1	219	11	US-11-096-568A-22194	Sequence 22194, A
886	25	52.1	47	9	US-10-916-827-22	Sequence 22, Appl	960	25	52.1	220	11	US-11-188-298-1798	Sequence 17798, A
887	25	52.1	63	7	US-10-467-657-2663	Sequence 2663, App	961	25	52.1	220	11	US-11-188-298-18409	Sequence 18409, A
888	25	52.1	65	7	US-09-978-360A-663	Sequence 663, App	962	25	52.1	220	11	US-11-188-298-18409	Sequence 28938, A
889	25	52.1	67	9	US-10-467-657-8068	Sequence 8068, Ap	963	25	52.1	222	11	US-11-096-568A-29538	Sequence 29538, A
890	25	52.1	68	11	US-11-096-568A-4434	Sequence 4434, Ap	964	25	52.1	222	11	US-11-096-568A-4703	Sequence 4703, Ap
891	25	52.1	82	11	US-11-096-568A-4432	Sequence 4432, Ap	965	25	52.1	224	11	US-11-096-568A-4703	Sequence 22730, A
892	25	52.1	82	11	US-11-264-096-1447	Sequence 1447, Ap	966	25	52.1	224	11	US-11-188-298-22370	Sequence 185, App
893	25	52.1	82	11	US-11-264-096-1448	Sequence 1448, Ap	967	25	52.1	226	9	US-10-878-556A-319	Sequence 319, App
894	25	52.1	83	9	US-10-934-944-305	Sequence 305, App	968	25	52.1	227	11	US-11-096-568A-33220	Sequence 33220, A
895	25	52.1	83	11	US-11-116-881A-2202	Sequence 2202, Ap	969	25	52.1	227	11		
896	25	52.1	90	11	US-11-079-463-8076	Sequence 8076, Ap	970	25	52.1	227	11		
897	25	52.1	96	11	US-11-004-399-3568	Sequence 3568, Ap							

```
971 25 52.1 228 11 US-11-100-183-21 Sequence 21, Appl
972 25 52.1 229 11 US-11-188-288-11804 Sequence 11804, A
973 25 52.1 230 11 US-11-100-183-48 Sequence 48, Appl
974 25 52.1 230 11 US-11-096-568A-33219 Sequence 33219, A
975 25 52.1 231 11 US-11-100-183-26 Sequence 26, Appl
976 25 52.1 231 11 US-11-100-183-37 Sequence 37, Appl
977 25 52.1 232 11 US-11-100-183-37 Sequence 37, Appl
978 25 52.1 232 11 US-11-072-512-2139 Sequence 18, Appl
979 25 52.1 232 11 US-11-096-568A-14955 Sequence 14955, A
980 25 52.1 233 11 US-11-188-298-8174 Sequence 8174, Ap
981 25 52.1 234 11 US-11-096-568A-7866 Sequence 7866, Ap
982 25 52.1 234 11 US-11-045-004-2146 Sequence 2146, Ap
983 25 52.1 236 11 US-11-100-183-15 Sequence 15, Appl
984 25 52.1 236 11 US-11-096-568A-22733 Sequence 22733, A
985 25 52.1 236 11 US-11-188-298-1472 Sequence 1472, Ap
986 25 52.1 237 11 US-11-100-183-11 Sequence 11, Appl
987 25 52.1 237 11 US-11-100-183-16 Sequence 16, Appl
988 25 52.1 237 11 US-11-188-298-9823 Sequence 9823, Ap
989 25 52.1 238 11 US-11-100-183-14 Sequence 14, Appl
990 25 52.1 239 11 US-11-096-568A-4422 Sequence 4422, Ap
991 25 52.1 239 11 US-11-188-298-5137 Sequence 5137, Ap
992 25 52.1 240 11 US-11-100-183-17 Sequence 17, Appl
993 25 52.1 240 11 US-11-096-568A-4675 Sequence 4675, Ap
994 25 52.1 240 11 US-11-096-568A-30490 Sequence 30490, A
995 25 52.1 240 11 US-11-078-463-8453 Sequence 8453, Ap
996 25 52.1 241 11 US-11-100-183-19 Sequence 19, Appl
997 25 52.1 242 11 US-11-100-183-10 Sequence 10, Appl
998 25 52.1 242 11 US-11-100-183-12 Sequence 12, Appl
999 25 52.1 242 11 US-11-100-183-20 Sequence 20, Appl
1000 25 52.1 242 11 US-11-172-740-2286 Sequence 2286, Ap
```

ALIGNMENTS

```
RESULT 1
US-10-511-814-8
; Sequence 8, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT FILING DATE: US/10/511,814
; PRIOR FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-8
Query Match 100.0%; Score 48; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT FILING DATE: US/10/511,814
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-11
Query Match 100.0%; Score 48; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 3
US-10-530-253-14
; Sequence 14, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casaccia, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT FILING DATE: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-14
Query Match 100.0%; Score 48; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 2
US-10-511-814-11
; Sequence 11, Application US/10511814
```

```
RESULT 4
US-11-179-478-4
; Sequence 4, Application US/11179478
; Publication No. US20050249745A1
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; APPLICANT: HALLEK, Michael
```

TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
TITLE OF INVENTION: FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/179,478
FILING DATE: 13-JULY-2005
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-11-179-478-4

Query Match 100.0%; Score 48; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
Db 7 TLHEYMIDL 15

RESULT 5
US-10-530-253-1
Sequence 1, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
PRIOR FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-1

Query Match 100.0%; Score 48; DB 9; Length 248;

Best Local Similarity 100.0%; Pred. No. 0.031;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
Db 157 TLHEYMIDL 165

RESULT 6
US-10-530-253-3
Sequence 3, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
PRIOR FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.031;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
Db 157 TLHEYMIDL 165

RESULT 7
US-10-530-253-5
Sequence 5, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
PRIOR FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.031;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9

Db 157 TLHEYMIDL 165

```
RESULT 8
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.031;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||||
7 TLHEYMIDL 15

```
RESULT 9
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.031;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||||
7 TLHEYMIDL 15

RESULT 10
US-10-530-253-11

```
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.031;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||||
7 TLHEYMIDL 15

```
RESULT 11
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANG, XIAOMU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
; CURRENT APPLICATION NUMBER: US/11/192,923A
; CURRENT FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2
```

Query Match 100.0%; Score 48; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||||
7 TLHEYMIDL 15

```
RESULT 12
US-10-530-061-1711
; Sequence 1711, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
```


FILE REFERENCE: 2060.033US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1711
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1711

Query Match 81.2%; Score 39; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.079;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 HEYMLDL 9
DB 1 HEYMLDL 7

RESULT 13
US-10-530-253-36
Sequence 36, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casseati, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 36
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 58
US-10-530-253-36

Query Match 75.0%; Score 36; DB 9; Length 98;
Best Local Similarity 77.8%; Pred. No. 2.7;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLHEYMLDL 9
DB 7 TLHEYMLDL 15

RESULT 14
US-10-530-061-133
Sequence 133, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.033US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308

PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 133
LENGTH: 11
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-133

Query Match 72.9%; Score 35; DB 9; Length 11;
Best Local Similarity 77.8%; Pred. No. 0.35;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLHEYMLDL 9
DB 2 TLHEYMLDL 10

RESULT 15
US-10-530-061-145
Sequence 145, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.033US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 145
LENGTH: 11
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-145

Query Match 72.9%; Score 35; DB 9; Length 11;
Best Local Similarity 77.8%; Pred. No. 0.35;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLHEYMLDL 9
DB 2 TLHEYMLDL 10

RESULT 16
US-10-530-253-29
Sequence 29, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casseati, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929

;; PRIOR FILING DATE: 2002-10-03
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 29
;; LENGTH: 97
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 33
US-10-530-253-29

Query Match 72.9%; Score 35; DB 9; Length 97;
Best Local Similarity 77.8%; Pred. No. 4.3;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||:|
Db 7 TLHEYMIDL 15

RESULT 17
US-10-496-399-3
; Sequence 3, Application US/10496399
; Publication No. US20060088565A1
; GENERAL INFORMATION:
; APPLICANT: SCIL Biomedicals GmbH
; APPLICANT: KOHNERT, ULRICH
; APPLICANT: HELBERBRAND, KLAUS
; APPLICANT: POHLING, SYLKE
; APPLICANT: HAPPEBERGER, PETER
; TITLE OF INVENTION: DEVICE HAVING OSTEOINDUCTIVE AND OSTEOCONDUCTIVE PROPERTIES
; FILE REFERENCE: 009848-0308681
; CURRENT APPLICATION NUMBER: US/10/496,399
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: 01 12 7573.2
; PRIOR FILING DATE: 2001-11-19
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 501
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-496-399-3

Query Match 72.9%; Score 35; DB 8; Length 501;
Best Local Similarity 77.8%; Pred. No. 28;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||:|
Db 168 TPHEYMDSL 176

RESULT 18
US-11-191-072-2
; Sequence 2, Application US/11191072
; Publication No. US2005028255A1
; GENERAL INFORMATION:
; APPLICANT: Hotten, Gertrud
; APPLICANT: Bechtold, ROLF
; APPLICANT: Pohl, Jens
; TITLE OF INVENTION: Monomeric Protein of the TGF-beta Family
; FILE REFERENCE: 2923-128
; CURRENT APPLICATION NUMBER: US/11/191,072
; CURRENT FILING DATE: 2005-07-28
; PRIOR APPLICATION NUMBER: US/10/048,458
; PRIOR FILING DATE: 2002-02-06
; PRIOR APPLICATION NUMBER: PCT/EP00/07600
; PRIOR FILING DATE: 2000-08-04
; PRIOR APPLICATION NUMBER: EP 99115613.4
; PRIOR FILING DATE: 1999-08-06
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 501

;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; FEATURE:
;; NAME/KEY: misc_feature
;; LOCATION: (465)..(465)
;; OTHER INFORMATION: Xaa = any amino acid
US-11-191-072-2

Query Match 72.9%; Score 35; DB 11; Length 501;
Best Local Similarity 77.8%; Pred. No. 28;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TLHEYMIDL 9
|||:|
Db 168 TPHEYMDSL 176

RESULT 19
US-10-392-234A-67
; Sequence 67, Application US/10392234A
; Publication No. US2005025538A1
; GENERAL INFORMATION:
; APPLICANT: Pharmacia and Upjohn Corporation
; APPLICANT: Buxser, Steven
; APPLICANT: Poole, Keith
; APPLICANT: Decker, Douglas
; APPLICANT: Xianzh, Li
; TITLE OF INVENTION: Method for Screening for acRAB Transporter Family Inhibitors
; FILE REFERENCE: 6206
; CURRENT APPLICATION NUMBER: US/10/392,234A
; CURRENT FILING DATE: 2003-03-17
; PRIOR APPLICATION NUMBER: US 60/364,935
; PRIOR FILING DATE: 2002-03-15
; NUMBER OF SEQ ID NOS: 67
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 67
; LENGTH: 1032
; TYPE: PRT
; ORGANISM: Haemophilus influenzae
US-10-392-234A-67

Query Match 70.8%; Score 34; DB 9; Length 1032;
Best Local Similarity 75.0%; Pred. No. 1e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 LHBYWIDL 9
:::|
Db 517 VYEWIDL 524

RESULT 20
US-11-139-435-2
; Sequence 2, Application US/11139435
; Publication No. US20050287664A1
; GENERAL INFORMATION:
; APPLICANT: Fann, Ming-Ji
; TITLE OF INVENTION: Cellular Proliferation Control Factors
; FILE REFERENCE: 17741-002001
; CURRENT APPLICATION NUMBER: US/11/139,435
; CURRENT FILING DATE: 2005-05-27
; PRIOR APPLICATION NUMBER: US 60/575,611
; PRIOR FILING DATE: 2004-05-27
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 1191
; TYPE: PRT
; ORGANISM: M. musculus
US-11-139-435-2

Query Match 70.8%; Score 34; DB 11; Length 1191;
Best Local Similarity 62.5%; Pred. No. 1.2e+02;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMULD 8
|:|:|:|:
Db 566 TVEHYVLE 573

RESULT 21
US-11-139-435-3
; Sequence 3, Application US/11139435
; Publication No. US20050287664A1
; GENERAL INFORMATION:
; APPLICANT: Fann, Ming-Ji
; TITLE OF INVENTION: Cellular Proliferation Control Factors
; FILE REFERENCE: 17741-002001
; CURRENT APPLICATION NUMBER: US/11/139,435
; PRIOR FILING DATE: 2005-05-27
; PRIOR APPLICATION NUMBER: US 60/575,611
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 1193
; TYPE: PRT
; ORGANISM: R. norvegicus
US-11-139-435-3

Query Match 70.8%; Score 34; DB 11; Length 1193;
Best Local Similarity 62.5%; Pred. No. 1.2e+02;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLHEYMULD 8
|:|:|:|:
Db 567 TVEHYVLE 574

RESULT 22
US-10-530-253-28
; Sequence 28, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 31
US-10-530-253-28

Query Match 68.8%; Score 33; DB 9; Length 98;
Best Local Similarity 66.7%; Pred. No. 11;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLHEYMULD 9
|:|:|:|:
Db 7 TLQDYVLDL 15

RESULT 23
US-10-530-253-30
; Sequence 30, Application US/10530253
; Publication No. US20060014926A1

; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus type 35
US-10-530-253-30

Query Match 68.8%; Score 33; DB 9; Length 99;
Best Local Similarity 66.7%; Pred. No. 11;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLHEYMULD 9
|:|:|:|:
Db 7 TLQDYVLDL 15

RESULT 24
US-11-096-568A-25429
; Sequence 25429, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 25429
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(317)
; OTHER INFORMATION: Ceres Seq. ID no. 12595160
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (209)..(209)
; OTHER INFORMATION: xaa is any aa, unknown or other
US-11-096-568A-25429

Query Match 68.8%; Score 33; DB 11; Length 317;
Best Local Similarity 85.7%; Pred. No. 42;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 LHEHYMULD 8
|:|:|:|:
Db 132 LHEHYMULD 138

RESULT 25
US-11-096-568A-25428
; Sequence 25428, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Thery

```
FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 344/71
; SEQ ID NO 25428
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(329)
; OTHER INFORMATION: Ceres Seq. ID no. 12595159
; NAME/KEY: misc_feature
; LOCATION: (221)..(221)
; OTHER INFORMATION: Xaa is any aa, unknown or other
US-11-096-568A-25428

Query Match      68.8%; Score 33; DB 11; Length 329;
Best Local Similarity 85.7%; Pred. No. 43;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      2 LHEYMLD 8
        |||||
Db      144 LHEYRLD 150

RESULT 26
US-11-096-568A-25427
; Sequence 25427, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 344/71
; SEQ ID NO 25427
; LENGTH: 338
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(338)
; OTHER INFORMATION: Ceres Seq. ID no. 12595158
; NAME/KEY: misc_feature
; LOCATION: (230)..(230)
; OTHER INFORMATION: Xaa is any aa, unknown or other
US-11-096-568A-25427

Query Match      68.8%; Score 33; DB 11; Length 338;
Best Local Similarity 85.7%; Pred. No. 45;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      2 LHEYMLD 8
        |||||
Db      153 LHEYRLD 159

RESULT 27
US-11-188-298-5118
; Sequence 5118, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; NUMBER OF SEQ ID NOS: 60/592,978
; PRIOR APPLICATION NUMBER: 60/592,978
```

```
PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 5118
; LENGTH: 510
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(510)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-188-298-5118

Query Match      68.8%; Score 33; DB 11; Length 510;
Best Local Similarity 75.0%; Pred. No. 72;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      2 LHEYMLD 9
        |||||
Db      59 LHHYMTDL 66

RESULT 28
US-11-188-298-3154
; Sequence 3154, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 3154
; LENGTH: 520
; TYPE: PRT
; ORGANISM: Glycine max
US-11-188-298-3154

Query Match      68.8%; Score 33; DB 11; Length 520;
Best Local Similarity 75.0%; Pred. No. 73;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      2 LHEYMLD 9
        |||||
Db      59 LHHYMTDL 66

RESULT 29
US-10-506-454-1532
; Sequence 1532, Application US/10506454
; Publication No. US20060068386A1
; GENERAL INFORMATION:
; APPLICANT: Slesarev, Alexi I
; APPLICANT: Mezhevaya, Katiya V
; APPLICANT: Polushin, Nikolai N
; APPLICANT: Shcherbinina, Olga V
; APPLICANT: Shakhova, Vera V
; APPLICANT: Malykh, Andrei G
; APPLICANT: Kozavkin, Sergei A
; TITLE OF INVENTION: The Complete Genome and Protein Sequences of the Hyperthermophile
; TITLE OF INVENTION: Methanopyrus Kandleri AV19 and Monophyly of Archaeal Methanogens
; TITLE OF INVENTION: and Methods of Use Thereof
; FILE REFERENCE: FID001
; CURRENT APPLICATION NUMBER: US/10/506,454
; CURRENT FILING DATE: 2004-08-31
; PRIOR APPLICATION NUMBER: PCT/US03/06664
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: 60/361,742
; PRIOR FILING DATE: 2002-03-04
; NUMBER OF SEQ ID NOS: 1722
; SOFTWARE: PatentIn version 3.2
```

```

; SEQ ID NO 1532
; LENGTH: 1771
; TYPE: PRT
; ORGANISM: Methanopyrus kandleri
US-10-506-454-1532

```

```

Query Match      68.8%; Score 33; DB 9; Length 1771;
Best Local Similarity 62.5%; Pred. No. 3e+02;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      2 LHEHYMLDL 9
      |||::|||
Db      876 LHDFTLDL 883

```

```

RESULT 30
US-11-096-568A-25375
; Sequence 25375, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 25375
; LENGTH: 181
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(181)
; OTHER INFORMATION: Ceres Seq. ID no. 12589189
US-11-096-568A-25375

```

```

Query Match      66.7%; Score 32; DB 11; Length 181;
Best Local Similarity 71.4%; Pred. No. 35;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 TLHEHYML 7
      |||::|||
Db      163 TLHQVYLL 169

```

```

RESULT 31
US-11-188-298-15586
; Sequence 15586, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 15586
; LENGTH: 210
; TYPE: PRT
; ORGANISM: Triticum aestivum
US-11-188-298-15586

```

```

Query Match      66.7%; Score 32; DB 11; Length 210;
Best Local Similarity 55.6%; Pred. No. 41;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 TLHEHYMLDL 9
      |||::|||
Db      193 TTHEYAKDI 201

```

```

RESULT 32
US-11-096-568A-25373
; Sequence 25373, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 25373
; LENGTH: 242
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(242)
; OTHER INFORMATION: Ceres Seq. ID no. 12589187
US-11-096-568A-25373

```

```

Query Match      66.7%; Score 32; DB 11; Length 242;
Best Local Similarity 71.4%; Pred. No. 48;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 TLHEHYML 7
      |||::|||
Db      224 TLHQVYLL 230

```

```

RESULT 33
US-11-188-298-21510
; Sequence 21510, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 21510
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(318)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-188-298-21510

```

```

Query Match      66.7%; Score 32; DB 11; Length 318;
Best Local Similarity 55.6%; Pred. No. 66;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 TLHEHYMLDL 9
      |||::|||
Db      301 TTHEYAKDI 309

```

```

RESULT 34
US-11-188-298-5415
; Sequence 5415, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298

```

```

; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 5415
; LENGTH: 357
; TYPE: PRT
; ORGANISM: Trifolium aestivum
US-11-188-298-5415

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 357;
Best Local Similarity 55.6%; Pred. No. 76;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
|:|:|:|:|:
Db 340 TIHEYAKDI 348

RESULT 35
US-11-188-298-10690
; Sequence 10690, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 10690
; LENGTH: 391
; TYPE: PRT
; ORGANISM: Thermosynechococcus elongatus BP-1
US-11-188-298-10690

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 391;
Best Local Similarity 62.5%; Pred. No. 84;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 LHEYMLDL 9
|:|:|:|:|:
Db 307 LHRVLDI 314

RESULT 36
US-11-188-298-8306
; Sequence 8306, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 8306
; LENGTH: 457
; TYPE: PRT
; ORGANISM: Trifolium aestivum
US-11-188-298-8306

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 457;
Best Local Similarity 55.6%; Pred. No. 1e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
|:|:|:|:|:
Db 440 TIHEYAKDI 448
```

```

RESULT 37
US-11-188-298-16340
; Sequence 16340, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 16340
; LENGTH: 545
; TYPE: PRT
; ORGANISM: Trifolium aestivum
US-11-188-298-16340

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 545;
Best Local Similarity 55.6%; Pred. No. 1.2e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
|:|:|:|:|:
Db 528 TIHEYAKDI 536

RESULT 38
US-11-188-298-2432
; Sequence 2432, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 2432
; LENGTH: 661
; TYPE: PRT
; ORGANISM: Trifolium aestivum
US-11-188-298-2432

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 661;
Best Local Similarity 55.6%; Pred. No. 1.5e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
|:|:|:|:|:
Db 644 TIHEYAKDI 652

RESULT 39
US-11-188-298-16707
; Sequence 16707, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 16707
; LENGTH: 666
```

```

; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(666)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-188-298-16707

```

```

Query Match          66.7%; Score 32; DB 11; Length 666;
Best Local Similarity 55.6%; Pred. No. 1.5e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 TLHEYMDDL 9
        |||||
Db      649 TIHEYAKDI 657

```

```

RESULT 40
US-11-188-298-7111
; Sequence 7111, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 7111
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(674)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-188-298-7111

```

```

Query Match          66.7%; Score 32; DB 11; Length 674;
Best Local Similarity 55.6%; Pred. No. 1.6e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 TLHEYMDDL 9
        |||||
Db      657 TIHEYAKDI 665

```

```

RESULT 41
US-11-188-298-10743
; Sequence 10743, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 10743
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Zea mays
US-11-188-298-10743

```

```

Query Match          66.7%; Score 32; DB 11; Length 674;
Best Local Similarity 55.6%; Pred. No. 1.6e+02;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      1 TLHEYMDDL 9

```

```

Db      657 TIHEYAKDI 665

```

```

RESULT 42
US-11-087-099-2704
; Sequence 2704, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 2704
; LENGTH: 765
; TYPE: PRT
; ORGANISM: Hypocrea jecorina
US-11-087-099-2704

```

```

Query Match          66.7%; Score 32; DB 11; Length 765;
Best Local Similarity 85.7%; Pred. No. 1.8e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 TLHEYML 7
        |||||
Db      222 TLHEYYL 228

```

```

RESULT 43
US-11-188-298-2574
; Sequence 2574, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 2574
; LENGTH: 765
; TYPE: PRT
; ORGANISM: Hypocrea jecorina
US-11-188-298-2574

```

```

Query Match          66.7%; Score 32; DB 11; Length 765;
Best Local Similarity 85.7%; Pred. No. 1.8e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 TLHEYML 7
        |||||
Db      222 TLHEYYL 228

```

```

RESULT 44
US-11-188-298-11948
; Sequence 11948, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 11948
; LENGTH: 837

```

```
; TYPE: PRT
; ORGANISM: Triticum aestivum
US-11-188-298-11948

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 837;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
Db 820 TIHEYAKDI 828

RESULT 45
US-11-188-298-10379
; Sequence 10379, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 10379
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Oryza sativa
US-11-188-298-10379

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 928;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
Db 911 TIHEYAKDI 919

RESULT 46
US-11-188-298-14345
; Sequence 14345, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 14345
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Oryza sativa
US-11-188-298-14345

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 928;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
Db 911 TIHEYAKDI 919

RESULT 47
US-11-188-298-14566
; Sequence 14566, Application US/11188298
; Publication No. US20060075522A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 14566
; LENGTH: 937
; TYPE: PRT
; ORGANISM: Oryza sativa
US-11-188-298-14566

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 937;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
Db 920 TIHEYAKDI 928

RESULT 48
US-11-188-298-10424
; Sequence 10424, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 10424
; LENGTH: 951
; TYPE: PRT
; ORGANISM: Oryza sativa (japonica cultivar-group)
US-11-188-298-10424

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 951;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMLDL 9
Db 934 TIHEYAKDI 942

RESULT 49
US-11-188-298-8110
; Sequence 8110, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 8110
; LENGTH: 955
; TYPE: PRT
; ORGANISM: Ipomoea batatas
US-11-188-298-8110

Query Match
Best Local Similarity 66.7%; Score 32; DB 11; Length 955;
Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
```


Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TLHEYMIDL 9

Db 938 TIHEYAKDI 946

RESULT 50

US-11-188-298-19236

; Sequence 19236, Application US/11188298

; Publication No. US20060075522A1

; GENERAL INFORMATION:

; APPLICANT: Abad, Mark S. et al.

; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT

; FILE REFERENCE: 38-21(53452)B

; CURRENT APPLICATION NUMBER: US/11/188,298

; CURRENT FILING DATE: 2005-07-22

; PRIOR APPLICATION NUMBER: 60/592,978

; PRIOR FILING DATE: 2004-07-31

; NUMBER OF SEQ ID NOS: 22569

; SEQ ID NO 19236

; LENGTH: 955

; TYPE: PRT

; ORGANISM: Ipomoea batatas

US-11-188-298-19236

Query Match

Best Local Similarity

Matches

Qy

Db

66.7%; Score 32; DB 11; Length 955;

Best Local Similarity 55.6%; Pred. No. 2.3e+02;

Matches 5; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

1 TLHEYMIDL 9

938 TIHEYAKDI 946

Search completed: May 5, 2006, 08:07:48
Job time : 9.5 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OW protein - protein search, using SW model

Run on: May 5, 2006, 01:38:21 ; Search time 20.8 Seconds
(without alignments)
35.773 Million cell updates/sec

Title: US-08-170-344-14
Perfect score: 48
Sequence: 1 YMLDQPER 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Issued Patents AA: *
1: /cgn2_6/prodata/1/1aa/5-COMB.pep: *
2: /cgn2_6/prodata/1/1aa/6-COMB.pep: *
3: /cgn2_6/prodata/1/1aa/H-COMB.pep: *
4: /cgn2_6/prodata/1/1aa/PCTUS-COMB.pep: *
5: /cgn2_6/prodata/1/1aa/RE-COMB.pep: *
6: /cgn2_6/prodata/1/1aa/Backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	48	100.0	9	1	US-08-787-547-104
2	48	100.0	9	2	US-08-948-378A-17
3	48	100.0	9	2	US-09-169-425C-17
4	48	100.0	9	2	US-08-197-484-66
5	48	100.0	9	2	US-09-759-960-17
6	48	100.0	9	2	US-10-365-908-3
7	48	100.0	9	4	PCT-US95-02121-66
8	48	100.0	10	1	US-08-902-516-19
9	48	100.0	10	2	US-08-704-344-22
10	48	100.0	10	2	US-09-847-185-19
11	48	100.0	10	2	US-09-601-729-270
12	48	100.0	10	2	US-09-980-177A-19
13	48	100.0	18	2	US-08-075-541D-35
14	48	100.0	20	1	US-08-934-915-46
15	48	100.0	20	2	US-08-075-541D-43
16	48	100.0	20	2	US-08-075-541D-44
17	48	100.0	20	2	US-09-980-177A-69
18	48	100.0	23	2	US-09-980-523A-14
19	48	100.0	30	1	US-08-353-586-1
20	48	100.0	30	1	US-08-934-915-51
21	48	100.0	30	2	US-09-486-394-1
22	48	100.0	30	2	US-09-828-645-3
23	48	100.0	30	2	US-09-828-645-7
24	48	100.0	59	2	US-09-390-027-6
25	48	100.0	98	1	US-08-406-248-6
26	48	100.0	98	1	US-08-075-541D-42
27	48	100.0	98	2	US-09-382-616A-1

28	48	100.0	98	2	US-08-944-368A-4	Sequence 4, Appli
29	48	100.0	98	2	US-09-820-764-4	Sequence 4, Appli
30	48	100.0	98	2	US-09-613-303-8	Sequence 8, Appli
31	48	100.0	98	2	US-09-566-420-19	Sequence 19, Appli
32	48	100.0	98	2	US-09-968-118A-4	Sequence 1, Appli
33	48	100.0	98	2	US-09-728-466-1	Sequence 4, Appli
34	48	100.0	98	2	US-09-824-017-4	Sequence 8, Appli
35	48	100.0	98	2	US-10-267-311-8	Sequence 1, Appli
36	48	100.0	98	2	US-10-201-764-19	Sequence 19, Appli
37	48	100.0	98	2	US-09-637-766-3	Sequence 7, Appli
38	48	100.0	98	2	US-09-501-097A-7	Sequence 7, Appli
39	48	100.0	98	2	US-09-980-523A-12	Sequence 12, Appli
40	48	100.0	121	2	US-09-613-303-12	Sequence 12, Appli
41	48	100.0	121	2	US-10-267-311-12	Sequence 12, Appli
42	48	100.0	172	2	US-08-860-165-12	Sequence 12, Appli
43	48	100.0	172	2	US-09-359-382-12	Sequence 12, Appli
44	48	100.0	185	2	US-09-462-993-2	Sequence 3, Appli
45	48	100.0	198	2	US-09-613-303-35	Sequence 35, Appli
46	48	100.0	198	2	US-10-267-311-35	Sequence 35, Appli
47	48	100.0	220	2	US-09-485-885-1	Sequence 1, Appli
48	48	100.0	220	2	US-09-485-885-8	Sequence 8, Appli
49	48	100.0	239	2	US-09-485-885-12	Sequence 12, Appli
50	48	100.0	253	1	US-08-459-818-20	Sequence 20, Appli
51	48	100.0	253	1	US-08-889-666-20	Sequence 20, Appli
52	48	100.0	253	1	US-08-465-078-20	Sequence 20, Appli
53	48	100.0	253	1	US-08-725-776-20	Sequence 20, Appli
54	48	100.0	253	1	US-08-488-062-20	Sequence 20, Appli
55	48	100.0	263	1	US-08-117-083-9	Sequence 9, Appli
56	48	100.0	266	2	US-08-860-165-10	Sequence 10, Appli
57	48	100.0	266	2	US-09-359-382-10	Sequence 10, Appli
58	48	100.0	266	2	US-09-367-309A-1	Sequence 1, Appli
59	48	100.0	287	2	US-09-501-097A-25	Sequence 25, Appli
60	48	100.0	295	2	US-09-613-303-33	Sequence 33, Appli
61	48	100.0	295	2	US-10-267-311-33	Sequence 33, Appli
62	48	100.0	324	2	US-09-613-303-25	Sequence 25, Appli
63	48	100.0	324	2	US-10-267-311-25	Sequence 25, Appli
64	48	100.0	371	2	US-09-485-886-6	Sequence 6, Appli
65	48	100.0	390	2	US-09-485-885-14	Sequence 14, Appli
66	48	100.0	420	2	US-09-501-097A-12	Sequence 12, Appli
67	48	100.0	493	2	US-09-613-303-19	Sequence 19, Appli
68	48	100.0	493	2	US-10-267-311-19	Sequence 19, Appli
69	48	100.0	639	2	US-09-613-303-17	Sequence 17, Appli
70	48	100.0	639	2	US-10-267-311-17	Sequence 17, Appli
71	48	100.0	641	2	US-09-613-303-51	Sequence 51, Appli
72	48	100.0	641	2	US-10-267-311-51	Sequence 51, Appli
73	48	100.0	647	2	US-09-613-303-53	Sequence 53, Appli
74	48	100.0	647	2	US-10-267-311-53	Sequence 53, Appli
75	48	100.0	648	2	US-09-613-303-29	Sequence 29, Appli
76	48	100.0	648	2	US-10-267-311-29	Sequence 29, Appli
77	48	100.0	711	2	US-09-613-303-41	Sequence 41, Appli
78	48	100.0	711	2	US-10-267-311-41	Sequence 41, Appli
79	48	100.0	723	2	US-09-501-097A-20	Sequence 20, Appli
80	48	100.0	724	2	US-09-613-303-45	Sequence 45, Appli
81	48	100.0	724	2	US-10-267-311-45	Sequence 45, Appli
82	48	100.0	724	2	US-08-075-541D-34	Sequence 34, Appli
83	48	89.6	18	2	US-08-934-915-152	Sequence 152, Appli
84	48	89.6	20	1	US-08-217-188A-62	Sequence 62, Appli
85	48	85.4	9	1	US-08-687-725B-62	Sequence 62, Appli
86	48	85.4	9	2	US-08-667-725B-62	Sequence 62, Appli
87	48	85.4	9	2	US-09-007-748-62	Sequence 62, Appli
88	48	85.4	9	2	US-08-197-484-71	Sequence 71, Appli
89	48	85.4	9	4	PCT-US95-02121-71	Sequence 71, Appli
90	48	85.4	18	2	US-08-075-541D-45	Sequence 45, Appli
91	48	85.4	20	2	US-09-980-177A-70	Sequence 70, Appli
92	48	83.3	40	83.3	US-08-178-257-5	Sequence 5, Appli
93	48	83.3	356	1	US-08-756-317-5	Sequence 5, Appli
94	48	75.0	536	2	US-09-600-099-5	Sequence 5, Appli
95	48	70.8	200	1	US-08-187-829-3	Sequence 3, Appli
96	48	70.8	200	2	US-09-021-290-3	Sequence 3, Appli
97	48	70.8	200	2	US-09-572-046-3	Sequence 3, Appli
98	48	70.8	200	2	US-09-972-137-3	Sequence 3, Appli
99	48	70.8	201	2	US-08-987-418A-2	Sequence 2, Appli
100	48	70.8	201	2	US-09-343-062-2	Sequence 2, Appli

101	34	70.8	227	6	5498499-2	Patent No. 5498499	174	31	64.6	1180	2	US-09-153-757-8	Sequence 8, Appli
102	34	70.8	577	1	US-08-756-317-13	Sequence 13, Appli	175	31	64.6	1180	2	US-09-459-715-8	Sequence 8, Appli
103	34	70.8	693	2	US-09-248-796A-15575	Sequence 13575, A	176	31	64.6	1212	1	US-08-072-574-10	Sequence 10, Appli
104	34	70.8	858	2	US-09-949-002-498	Sequence 498, App	177	31	64.6	1212	1	US-08-486-270-10	Sequence 10, Appli
105	34	70.8	993	1	US-08-444-792-2	Sequence 2, Appli	178	31	64.6	1212	2	US-08-367-264-10	Sequence 5, Appli
106	34	70.8	993	1	US-08-445-042-2	Sequence 2, Appli	179	31	64.6	1212	2	US-08-660-148-5	Sequence 5, Appli
107	34	70.8	1039	2	US-09-409-648-7	Sequence 7, Appli	180	31	64.6	1212	2	US-09-153-757-10	Sequence 10, Appli
108	34	70.8	1039	2	US-09-409-648-8	Sequence 8, Appli	181	31	64.6	1212	2	US-09-459-715-10	Sequence 10, Appli
109	34	70.8	1039	2	US-09-054-272-10	Sequence 10, Appli	182	31	64.6	1212	2	US-09-635-481-7	Sequence 7, Appli
110	34	70.8	1039	2	US-09-949-002-298	Sequence 298, App	183	31	64.6	1223	2	US-09-071-035-236	Sequence 236, App
111	34	70.8	1039	6	5196511-2	Patent No. 5196511	184	31	64.6	1223	2	US-10-206-576-236	Sequence 236, App
112	33	68.8	292	2	US-09-902-540-11798	Sequence 11798, A	185	31	64.6	1301	2	US-09-071-035-238	Sequence 238, App
113	33	68.8	304	2	US-09-902-540-10922	Sequence 10922, A	186	31	64.6	1301	2	US-09-071-035-238	Sequence 238, App
114	33	68.8	359	2	US-10-171-374-2	Sequence 2, Appli	187	31	64.6	1301	2	US-09-071-035-242	Sequence 242, App
115	33	68.8	384	2	US-10-104-047-2534	Sequence 2534, Ap	188	31	64.6	1301	2	US-10-206-576-234	Sequence 234, App
116	33	68.8	418	2	US-09-252-991A-31753	Sequence 31753, A	189	31	64.6	1301	2	US-10-206-576-238	Sequence 238, App
117	33	68.8	552	2	US-09-907-794A-170	Sequence 170, App	190	31	64.6	1301	2	US-10-206-576-242	Sequence 242, App
118	33	68.8	552	2	US-09-905-125A-170	Sequence 170, App	191	31	64.6	1306	2	US-09-134-000C-6670	Sequence 6670, Ap
119	33	68.8	552	2	US-09-902-540-16152	Sequence 170, App	192	31	64.6	1896	2	US-09-964-956-13	Sequence 13, Appli
120	33	68.8	552	2	US-09-906-700-170	Sequence 170, App	193	31	64.6	2188	2	US-09-328-352-7763	Sequence 7763, Ap
121	33	68.8	552	2	US-09-903-603A-170	Sequence 170, App	194	31	64.6	2780	2	US-10-220-587-2	Sequence 2, Appli
122	33	68.8	552	2	US-09-904-920A-170	Sequence 170, App	195	30	62.5	60	2	US-09-248-786A-27132	Sequence 27132, A
123	33	68.8	552	2	US-09-909-064-170	Sequence 170, App	196	30	62.5	137	2	US-09-270-767-24597	Sequence 34597, A
124	33	68.8	552	2	US-09-905-381A-170	Sequence 170, App	197	30	62.5	137	2	US-09-270-767-24597	Sequence 34597, A
125	33	68.8	552	2	US-09-906-618-170	Sequence 170, App	198	30	62.5	141	2	US-10-007-761-2	Sequence 49814, A
126	33	68.8	552	2	US-09-906-646-170	Sequence 170, App	199	30	62.5	168	2	US-08-444-628-9	Sequence 9, Appli
127	33	68.8	552	2	US-09-904-462-170	Sequence 170, App	200	30	62.5	168	2	US-08-357-820-9	Sequence 9, Appli
128	33	68.8	552	2	US-09-902-736A-170	Sequence 170, App	201	30	62.5	171	1	US-08-303-270-1	Sequence 1, Appli
129	33	68.8	552	2	US-09-906-722A-170	Sequence 170, App	202	30	62.5	194	2	US-09-902-540-09979	Sequence 9979, Ap
130	33	68.8	654	2	US-09-902-540-16152	Sequence 16152, A	203	30	62.5	247	2	US-09-902-540-16013	Sequence 16013, A
131	33	68.8	1963	2	US-09-964-956-43	Sequence 43, Appli	204	30	62.5	254	2	US-09-252-991A-17480	Sequence 17480, A
132	32	66.7	183	2	US-09-328-352-453	Sequence 4153, Ap	205	30	62.5	254	2	US-09-543-681A-6354	Sequence 6354, Ap
133	32	66.7	450	2	US-09-809-665A-28	Sequence 28, Appli	206	30	62.5	319	2	US-09-771-161A-118	Sequence 118, App
134	32	66.7	470	2	US-09-248-796A-20647	Sequence 20647, A	207	30	62.5	330	2	US-09-248-796A-18927	Sequence 18927, A
135	32	66.7	505	2	US-09-328-352-7155	Sequence 7155, Ap	208	30	62.5	351	2	US-08-178-287-6	Sequence 6, Appli
136	32	66.7	601	1	US-08-756-317-15	Sequence 15, Appli	209	30	62.5	366	2	US-09-248-796A-17059	Sequence 17059, A
137	32	66.7	621	1	US-08-756-317-9	Sequence 9, Appli	210	30	62.5	373	1	US-08-599-111A-26	Sequence 26, Appli
138	32	66.7	652	1	US-08-765-081-6	Sequence 6, Appli	211	30	62.5	373	1	US-08-646-580B-26	Sequence 26, Appli
139	32	66.7	652	2	US-09-098-082-6	Sequence 6, Appli	212	30	62.5	373	2	US-09-059-266-26	Sequence 26, Appli
140	32	66.7	669	2	US-09-809-665A-105	Sequence 105, App	213	30	62.5	373	2	US-09-412-184-26	Sequence 26, Appli
141	32	66.7	718	4	PCT-US95-06994-7	Sequence 7, Appli	214	30	62.5	390	2	US-09-647-621A-2	Sequence 2, Appli
142	32	66.7	762	2	US-09-579-365-2	Sequence 2, Appli	215	30	62.5	391	2	US-09-543-681A-5945	Sequence 5945, Ap
143	32	66.7	762	2	US-09-807-063-2	Sequence 2, Appli	216	30	62.5	404	2	US-09-107-532A-6741	Sequence 6741, Ap
144	31	64.6	86	2	US-09-583-110-4725	Sequence 4726, Ap	217	30	62.5	418	2	US-09-489-039A-13585	Sequence 13585, A
145	31	64.6	102	2	US-09-270-767-58664	Sequence 58664, A	218	30	62.5	436	2	US-08-669-378-2	Sequence 2, Appli
146	31	64.6	154	2	US-09-540-236-2147	Sequence 2147, Ap	219	30	62.5	436	2	US-08-669-378-6	Sequence 4, Appli
147	31	64.6	165	2	US-09-540-236-3816	Sequence 3816, Ap	220	30	62.5	436	2	US-08-669-378-8	Sequence 8, Appli
148	31	64.6	247	2	US-09-543-681A-6961	Sequence 6961, Ap	221	30	62.5	436	2	US-08-669-378-10	Sequence 10, Appli
149	31	64.6	313	2	US-09-198-452A-142	Sequence 142, App	222	30	62.5	436	2	US-08-669-378-10	Sequence 10, Appli
150	31	64.6	501	2	US-09-323-998E-55	Sequence 55, Appli	223	30	62.5	436	2	US-08-669-378-12	Sequence 12, Appli
151	31	64.6	529	2	US-09-134-000C-4524	Sequence 4524, Ap	224	30	62.5	467	2	US-08-701-582D-2	Sequence 2, Appli
152	31	64.6	537	2	US-09-902-540-12106	Sequence 12112, A	225	30	62.5	467	2	US-08-701-582D-4	Sequence 4, Appli
153	31	64.6	583	2	US-09-902-540-12112	Sequence 43661, A	226	30	62.5	467	2	US-09-082-039A-2	Sequence 2, Appli
154	31	64.6	604	1	US-08-756-317-6	Sequence 6, Appli	227	30	62.5	467	2	US-09-082-039A-15	Sequence 15, Appli
155	31	64.6	606	2	US-09-071-035-240	Sequence 240, App	228	30	62.5	467	2	US-08-840-767-42	Sequence 42, Appli
156	31	64.6	606	2	US-10-206-576-240	Sequence 240, App	229	30	62.5	467	2	US-08-840-767-80	Sequence 80, Appli
157	31	64.6	631	2	US-09-902-540-12106	Sequence 12106, A	230	30	62.5	467	2	US-09-096-776B-7	Sequence 7, Appli
158	31	64.6	734	2	US-09-438-185A-125	Sequence 125, App	231	30	62.5	467	2	US-09-087-134-5	Sequence 5, Appli
159	31	64.6	784	2	US-09-489-039A-12372	Sequence 12372, A	232	30	62.5	467	2	US-09-552-138-2	Sequence 2, Appli
160	31	64.6	854	2	US-09-902-540-15925	Sequence 15925, A	233	30	62.5	467	2	US-09-552-138-15	Sequence 15, Appli
161	31	64.6	877	1	US-08-072-574-12	Sequence 12, Appli	234	30	62.5	467	2	US-09-923-922-7	Sequence 7, Appli
162	31	64.6	877	1	US-08-486-270-12	Sequence 12, Appli	235	30	62.5	468	2	US-09-602-787A-324	Sequence 324, App
163	31	64.6	877	2	US-08-367-264-12	Sequence 12, Appli	236	30	62.5	476	2	US-09-252-991A-31416	Sequence 31416, A
164	31	64.6	877	2	US-09-153-757-12	Sequence 12, Appli	237	30	62.5	477	2	US-09-113-309-3	Sequence 3, Appli
165	31	64.6	877	2	US-09-459-715-12	Sequence 12, Appli	238	30	62.5	477	2	US-09-521-107-3	Sequence 3, Appli
166	31	64.6	942	2	US-09-695-481-2	Sequence 2, Appli	239	30	62.5	477	2	US-08-840-767-80	Sequence 8, Appli
167	31	64.6	1043	2	US-09-695-481-6	Sequence 6, Appli	240	30	62.5	477	2	US-09-562-332-3	Sequence 3, Appli
168	31	64.6	1076	2	US-09-949-016-6610	Sequence 6610, Ap	241	30	62.5	481	2	US-09-248-796A-19316	Sequence 19316, A
169	31	64.6	1100	2	US-09-949-016-7524	Sequence 7524, Ap	242	30	62.5	485	2	US-09-949-016-7633	Sequence 7633, Ap
170	31	64.6	1180	1	US-08-072-574-8	Sequence 8, Appli	243	30	62.5	498	2	US-09-583-110-2949	Sequence 2949, Ap
171	31	64.6	1180	1	US-08-486-270-8	Sequence 8, Appli	244	30	62.5	499	2	US-09-107-532A-7265	Sequence 7265, Ap
172	31	64.6	1180	2	US-08-367-264-8	Sequence 8, Appli	245	30	62.5	500	2	US-09-252-991A-25053	Sequence 25053, A
173	31	64.6	1180	2	US-08-660-148-2	Sequence 2, Appli	246	30	62.5	500	2	US-09-543-681A-4601	Sequence 4601, Ap

247	30	62.5	505	2	US-09-729-995-2	Sequence 2, Appli	320	29	60.4	224	5	US-09-640-305-7	Sequence 7, Appli
248	30	62.5	505	2	US-09-729-995-4	Sequence 4, Appli	321	29	60.4	225	2	US-08-463-682-23	Sequence 23, Appli
249	30	62.5	505	2	US-10-135-689-2	Sequence 2, Appli	322	29	60.4	226	1	US-08-347-594A-4	Sequence 4, Appli
250	30	62.5	505	2	US-10-135-689-4	Sequence 4, Appli	323	29	60.4	226	2	US-08-463-682-5	Sequence 5, Appli
251	30	62.5	505	2	US-10-690-617-2	Sequence 2, Appli	324	29	60.4	247	1	US-08-797-689-4	Sequence 4, Appli
252	30	62.5	505	2	US-10-690-617-4	Sequence 4, Appli	325	29	60.4	247	2	US-08-984-166-4	Sequence 4, Appli
253	30	62.5	510	2	US-09-107-433-2518	Sequence 2618, Ap	326	29	60.4	255	2	US-09-107-532A-3831	Sequence 3831, Ap
254	30	62.5	523	2	US-09-543-681A-5151	Sequence 5151, Ap	327	29	60.4	257	2	US-09-328-352-6231	Sequence 6231, Ap
255	30	62.5	538	2	US-09-270-767-57575	Sequence 57575, A	328	29	60.4	260	2	US-09-252-991A-2031	Sequence 2031, A
256	30	62.5	559	1	US-08-756-317-10	Sequence 10, Appli	329	29	60.4	266	2	US-09-134-000C-6091	Sequence 6091, A
257	30	62.5	559	2	US-09-821-016-1	Sequence 1, Appli	330	29	60.4	270	2	US-09-136-422A-820	Sequence 820, App
258	30	62.5	559	2	US-09-091-609-4	Sequence 4, Appli	331	29	60.4	270	2	US-09-438-185A-772	Sequence 772, App
259	30	62.5	559	2	US-10-259-632-1	Sequence 1, Appli	332	29	60.4	271	2	US-09-438-185A-772	Sequence 4432, A
260	30	62.5	559	2	US-10-266-787-1	Sequence 1, Appli	333	29	60.4	292	2	US-09-270-767-44632	Sequence 8013, Ap
261	30	62.5	559	2	US-10-245-765-1	Sequence 1, Appli	334	29	60.4	294	2	US-09-328-352-8013	Sequence 2768, Ap
262	30	62.5	559	2	US-10-252-518-1	Sequence 1, Appli	335	29	60.4	303	2	US-09-828-553A-20	Sequence 20, Appli
263	30	62.5	559	2	US-10-914-242-1	Sequence 1, Appli	336	29	60.4	304	2	US-08-506-286B-57	Sequence 57, Appli
264	30	62.5	560	2	US-08-756-317-8	Sequence 8, Appli	337	29	60.4	311	2	US-09-828-553A-86	Sequence 86, Appli
265	30	62.5	560	1	US-09-672-749-4	Sequence 4, Appli	338	29	60.4	317	2	US-09-134-001C-4437	Sequence 4437, Ap
266	30	62.5	582	2	US-09-252-991A-32575	Sequence 32575, A	339	29	60.4	320	1	US-07-841-591A-15	Sequence 15, Appli
267	30	62.5	618	2	US-10-104-047-3605	Sequence 3605, Ap	340	29	60.4	320	4	PCT-US93-02034-15	Sequence 367, App
268	30	62.5	631	2	US-08-448-489-17	Sequence 17, Appli	341	29	60.4	349	2	US-09-543-681A-7486	Sequence 7486, Ap
269	30	62.5	631	2	US-09-689-730-17	Sequence 17, Appli	342	29	60.4	353	2	US-09-252-991A-27056	Sequence 27056, A
270	30	62.5	660	2	US-08-704-711A-18	Sequence 18, Appli	343	29	60.4	356	2	US-09-175-928-2	Sequence 15, Appli
271	30	62.5	660	2	US-09-521-220-18	Sequence 18, Appli	344	29	60.4	387	2	US-09-087-134-8	Sequence 8, Appli
272	30	62.5	660	2	US-09-391-104-19	Sequence 19, Appli	345	29	60.4	424	2	US-09-087-134-8	Sequence 2, Appli
273	30	62.5	660	2	US-09-917-254-89	Sequence 89, Appli	346	29	60.4	425	1	US-09-066-776B-8	Sequence 8, Appli
274	30	62.5	660	2	US-09-949-016-6512	Sequence 6512, Ap	347	29	60.4	425	2	US-09-183-922-8	Sequence 2, Appli
275	30	62.5	660	2	US-09-949-016-7937	Sequence 7937, Ap	348	29	60.4	425	2	US-09-923-922-8	Sequence 8, Appli
276	30	62.5	660	2	US-10-153-185-14	Sequence 14, Appli	349	29	60.4	425	2	US-09-949-016-6670	Sequence 6670, Ap
277	30	62.5	663	2	US-09-194-468A-30	Sequence 30, Appli	350	29	60.4	427	2	US-08-506-296B-56	Sequence 56, Appli
278	30	62.5	676	2	US-09-313-930-2	Sequence 2, Appli	351	29	60.4	427	2	US-08-506-296B-56	Sequence 116, App
279	30	62.5	676	2	US-09-771-161A-209	Sequence 209, App	352	29	60.4	431	2	US-09-538-092-116	Sequence 18, Appli
280	30	62.5	684	2	US-09-949-016-11575	Sequence 11575, A	353	29	60.4	431	2	US-08-840-767-6	Sequence 6, Appli
281	30	62.5	698	2	US-09-270-767-42292	Sequence 42292, A	354	29	60.4	436	2	US-08-586-305A-18	Sequence 18, Appli
282	30	62.5	714	2	US-10-087-402-19	Sequence 19, Appli	355	29	60.4	436	2	US-09-586-305A-11	Sequence 11, Appli
283	30	62.5	718	2	US-09-090-808-2	Sequence 2, Appli	356	29	60.4	438	2	US-09-586-305A-12	Sequence 12, Appli
284	30	62.5	718	2	US-09-447-453-2	Sequence 2, Appli	357	29	60.4	438	2	US-09-586-305A-13	Sequence 13, Appli
285	30	62.5	718	2	US-09-417-197-75	Sequence 75, Appli	358	29	60.4	438	2	US-09-586-305A-15	Sequence 15, Appli
286	30	62.5	718	2	US-10-117-846-2	Sequence 2, Appli	359	29	60.4	438	2	US-09-586-305A-17	Sequence 17, Appli
287	30	62.5	719	2	US-09-417-197-51	Sequence 51, Appli	360	29	60.4	438	2	US-09-586-305A-19	Sequence 19, Appli
288	30	62.5	805	2	US-09-598-401C-77	Sequence 77, Appli	361	29	60.4	438	2	US-09-586-305A-20	Sequence 20, Appli
289	30	62.5	857	2	US-09-252-991A-31764	Sequence 31764, A	362	29	60.4	442	2	US-09-586-305A-20	Sequence 70, Appli
290	30	62.5	901	2	US-09-538-092-826	Sequence 826, App	363	29	60.4	442	2	US-08-506-296B-70	Sequence 70, Appli
291	30	62.5	952	2	US-10-216-556A-2	Sequence 2, Appli	364	29	60.4	461	2	US-10-104-047-2367	Sequence 2367, Ap
292	30	62.5	956	2	US-09-962-955D-40	Sequence 40, Appli	365	29	60.4	461	2	US-09-949-016-7630	Sequence 2, Appli
293	30	62.5	1366	2	US-09-712-363-177	Sequence 177, App	366	29	60.4	466	1	US-07-923-733-2	Sequence 2, Appli
294	30	62.5	1358	2	US-09-949-016-6803	Sequence 6803, Ap	367	29	60.4	466	1	US-09-087-134-2	Sequence 15, Appli
295	30	62.5	1606	2	US-09-949-016-7371	Sequence 7371, Ap	368	29	60.4	467	2	US-08-580-031A-15	Sequence 29454, A
296	30	62.5	3635	2	US-09-845-583A-2	Sequence 2, Appli	369	29	60.4	467	2	US-09-252-991A-29454	Sequence 14257, A
297	30	62.5	3635	2	US-10-037-417-47	Sequence 47, Appli	370	29	60.4	505	2	US-09-489-039A-14257	Sequence 12885, A
298	30	62.5	3635	2	US-10-037-417-47	Sequence 47, Appli	371	29	60.4	511	2	US-09-489-039A-12885	Sequence 69, Appli
299	30	62.5	5215	2	US-09-105-537-2	Sequence 2, Appli	372	29	60.4	523	2	US-08-506-296B-69	Sequence 2, Appli
300	29	60.4	17	1	US-08-844-192-89	Sequence 89, Appli	373	29	60.4	542	2	US-08-506-296B-69	Sequence 2, Appli
301	29	60.4	77	1	US-09-134-001C-3500	Sequence 3500, Ap	374	29	60.4	561	1	US-08-360-673-2	Sequence 2, Appli
302	29	60.4	84	2	US-09-270-767-33781	Sequence 33781, A	375	29	60.4	561	5	US-10-104-047-2045	Sequence 2045, Ap
303	29	60.4	84	2	US-09-270-767-48998	Sequence 48998, A	376	29	60.4	620	2	US-09-107-433-4944	Sequence 4944, Ap
304	29	60.4	88	2	US-09-513-999C-7010	Sequence 7010, Ap	377	29	60.4	642	2	US-08-506-296B-68	Sequence 68, Appli
305	29	60.4	93	1	US-08-797-689-10	Sequence 10, Appli	378	29	60.4	665	2	US-09-506-296B-68	Sequence 44732, A
306	29	60.4	93	2	US-09-984-186-10	Sequence 10, Appli	379	29	60.4	709	2	US-09-270-767-44732	Sequence 5113, Ap
307	29	60.4	95	2	US-09-605-703B-1630	Sequence 1630, Ap	380	29	60.4	756	2	US-09-711-164-426	Sequence 426, App
308	29	60.4	99	1	US-08-341-843B-26	Sequence 26, Appli	381	29	60.4	887	1	US-09-949-016-7764	Sequence 7764, Ap
309	29	60.4	99	1	US-08-427-497B-31	Sequence 31, Appli	382	29	60.4	887	1	US-08-327-494A-4	Sequence 4, Appli
310	29	60.4	113	2	US-09-878-281A-204	Sequence 204, App	383	29	60.4	887	2	PCT-US95-13659-4	Sequence 4, Appli
311	29	60.4	122	2	US-09-252-991A-24712	Sequence 24712, A	384	29	60.4	903	2	US-09-252-991A-24977	Sequence 24977, A
312	29	60.4	155	2	US-09-902-540-9947	Sequence 9947, Ap	385	29	60.4	919	2	US-08-377-503-2	Sequence 2, Appli
313	29	60.4	158	2	US-09-198-452A-383	Sequence 383, App	386	29	60.4	919	2	US-08-178-019-2	Sequence 2, Appli
314	29	60.4	158	2	US-09-270-767-33197	Sequence 33197, A	387	29	60.4	921	1	US-07-718-575-14	Sequence 14, Appli
315	29	60.4	158	2	US-09-270-767-48414	Sequence 48414, A	388	29	60.4	921	1	US-08-481-206-14	Sequence 14, Appli
316	29	60.4	196	2	US-09-540-236-1127	Sequence 3127, Ap	389	29	60.4	921	1	US-08-486-269A-14	Sequence 19, Appli
317	29	60.4	204	2	US-08-506-296B-58	Sequence 58, Appli	390	29	60.4	1075	1	US-08-993-228-19	Sequence 19, Appli
318	29	60.4	220	2	US-08-463-682-24	Sequence 24, Appli	391	29	60.4	1253	2	US-08-506-296B-14	Sequence 14, Appli
319	29	60.4	224	1	US-08-360-673-7	Sequence 7, Appli	392	29	60.4				

393	29	60.4	1380	2	US-09-328-352-8132	Sequence 8132, Ap	466	28	58.3	379	1	US-08-429-964-5	Sequence 5, Appl1
394	29	60.4	1571	2	US-09-902-540-11083	Sequence 11083, A	467	28	58.3	379	2	US-07-935-087-5	Sequence 5, Appl1
395	29	60.4	2050	1	US-08-347-594A-2	Sequence 2, Appl1	468	28	58.3	379	2	US-09-538-092-1149	Sequence 1149, Ap
396	29	60.4	2777	2	US-10-220-587-4	Sequence 4, Appl1	469	28	58.3	379	4	PCT-US93-08062-5	Sequence 5, Appl1
397	29	60.4	2813	2	US-08-896-449A-2	Sequence 2, Appl1	470	28	58.3	379	4	PCT-US93-10442-8	Sequence 8, Appl1
398	29	60.4	2813	2	US-09-132-652-2	Sequence 2, Appl1	471	28	58.3	392	2	US-09-491-577-90	Sequence 90, Appl1
399	29	60.4	2813	2	US-09-381-261A-1	Sequence 1, Appl1	472	28	58.3	401	2	US-09-248-796A-25547	Sequence 25547, A
400	29	60.4	2813	2	US-09-886-900A-2	Sequence 2, Appl1	473	28	58.3	403	2	US-08-887-534A-83	Sequence 83, Appl1
401	29	60.4	2813	2	US-09-662-478C-2	Sequence 2, Appl1	474	28	58.3	403	2	US-09-527-431-84	Sequence 83, Appl1
402	28.5	55.3	21	2	US-09-367-309A-5	Sequence 3, Appl1	475	28	58.3	403	2	US-09-446-861-83	Sequence 83, Appl1
403	28	55.3	17	2	US-09-895-940C-33	Sequence 33, Appl1	476	28	58.3	406	2	US-09-252-991A-19757	Sequence 19757, A
404	28	55.3	30	2	US-08-453-485E-100	Sequence 100, App	477	28	58.3	406	2	US-09-538-032-143	Sequence 143, App
405	28	55.3	33	2	US-09-270-767-61357	Sequence 61357, A	478	28	58.3	430	2	US-08-686-968C-3	Sequence 3, Appl1
406	28	55.3	34	6	5514582-23	Patent No. 5514582	479	28	58.3	439	2	US-08-311-717A-178	Sequence 178, App
407	28	55.3	73	2	US-09-270-767-38044	Sequence 38044, A	480	28	58.3	453	2	US-09-013-881-5	Sequence 5, Appl1
408	28	55.3	73	2	US-09-270-767-53261	Sequence 53261, A	481	28	58.3	453	2	US-09-612-473-5	Sequence 5, Appl1
409	28	55.3	86	2	US-09-381-122A-24	Sequence 24, Appl1	482	28	58.3	455	2	US-09-240-639-10	Sequence 10, Appl1
410	28	55.3	101	2	US-09-732-210-755	Sequence 755, App	483	28	58.3	455	2	US-09-908-510A-10	Sequence 10, Appl1
411	28	55.3	102	1	US-08-710-749-21	Sequence 21, Appl1	484	28	58.3	455	2	US-09-905-744B-10	Sequence 10, Appl1
412	28	55.3	102	2	US-09-147-875A-18	Sequence 18, Appl1	485	28	58.3	455	2	US-10-107-660-10	Sequence 10, Appl1
413	28	55.3	104	2	US-09-205-258-434	Sequence 434, App	486	28	58.3	455	2	US-10-107-576-10	Sequence 10, Appl1
414	28	55.3	104	2	US-10-004-860-434	Sequence 434, App	487	28	58.3	455	2	US-09-905-732B-10	Sequence 10, Appl1
415	28	55.3	105	2	US-09-134-000C-5204	Sequence 5204, Ap	488	28	58.3	455	2	US-09-905-743B-10	Sequence 10, Appl1
416	28	55.3	145	2	US-09-270-767-42404	Sequence 42404, A	489	28	58.3	455	2	US-09-905-589-10	Sequence 10, Appl1
417	28	55.3	152	2	US-09-252-991A-24753	Sequence 24753, A	490	28	58.3	455	2	US-10-108-171A-10	Sequence 10, Appl1
418	28	55.3	160	2	US-09-583-110-4933	Sequence 4933, Ap	491	28	58.3	461	1	US-08-332-625-24	Sequence 24, Appl1
419	28	55.3	162	2	US-09-107-433-3095	Sequence 3095, Ap	492	28	58.3	461	1	US-08-466-961A-24	Sequence 24, Appl1
420	28	55.3	163	2	US-09-902-540-16815	Sequence 16815, A	493	28	58.3	461	1	US-08-645-193B-26	Sequence 26, Appl1
421	28	55.3	172	2	US-09-248-796A-19469	Sequence 19469, A	494	28	58.3	469	2	US-09-489-039A-9091	Sequence 9091, Ap
422	28	55.3	187	2	US-09-540-236-3818	Sequence 3818, Ap	495	28	58.3	474	2	US-10-197-220-999	Sequence 99, Appl1
423	28	55.3	198	2	US-09-981-087A-25	Sequence 25, Appl1	496	28	58.3	478	2	US-09-570-454-2	Sequence 2, Appl1
424	28	55.3	198	2	US-09-978-382A-25	Sequence 25, Appl1	497	28	58.3	478	2	US-09-252-991A-31666	Sequence 31666, A
425	28	55.3	198	2	US-09-978-740A-25	Sequence 25, Appl1	498	28	58.3	478	2	US-09-867-631-2	Sequence 2, Appl1
426	28	55.3	198	2	US-09-978-729A-25	Sequence 25, Appl1	499	28	58.3	486	2	US-09-328-352-6007	Sequence 6007, Ap
427	28	55.3	198	2	US-09-978-730-25	Sequence 25, Appl1	500	28	58.3	511	2	US-09-633-328B-4	Sequence 4, Appl1
428	28	55.3	204	2	US-09-323-832A-13	Sequence 13, Appl1	501	28	58.3	524	2	US-09-248-796A-14296	Sequence 14296, A
429	28	55.3	204	2	US-09-072-433-22	Sequence 22, Appl1	502	28	58.3	539	1	US-08-818-024-4	Sequence 4, Appl1
430	28	55.3	211	2	US-09-602-777A-242	Sequence 242, App	503	28	58.3	539	2	US-09-334-775A-4	Sequence 4, Appl1
431	28	55.3	221	2	US-09-543-681A-4766	Sequence 4766, Ap	504	28	58.3	539	2	US-08-789-275-6	Sequence 6, Appl1
432	28	55.3	231	2	US-09-543-681A-5221	Sequence 5221, Ap	505	28	58.3	542	2	US-09-198-452A-496	Sequence 496, App
433	28	55.3	237	1	US-08-469-537A-85	Sequence 85, Appl1	506	28	58.3	561	1	US-08-756-317-14	Sequence 14, Appl1
434	28	55.3	237	1	US-09-149-476-494	Sequence 494, App	507	28	58.3	579	2	US-09-252-991A-30224	Sequence 30224, A
435	28	55.3	239	2	US-09-902-540-13874	Sequence 13874, A	508	28	58.3	587	2	US-09-579-383-4	Sequence 4, Appl1
436	28	55.3	243	2	US-09-270-767-33897	Sequence 33897, A	509	28	58.3	594	1	US-08-910-856-2	Sequence 2, Appl1
437	28	55.3	243	2	US-09-270-767-48114	Sequence 48114, A	510	28	58.3	644	1	US-08-336-708A-9	Sequence 9, Appl1
438	28	55.3	252	1	US-07-857-224B-26	Sequence 26, Appl1	511	28	58.3	663	1	US-08-765-081-7	Sequence 7, Appl1
439	28	55.3	254	2	US-09-248-796A-18872	Sequence 18872, A	512	28	58.3	663	2	US-09-098-082-7	Sequence 7, Appl1
440	28	55.3	254	2	US-09-796-149B-4	Sequence 4, Appl1	513	28	58.3	672	2	US-10-069-056-2	Sequence 2, Appl1
441	28	55.3	266	2	US-09-252-991A-19949	Sequence 19949, A	514	28	58.3	672	2	US-10-069-056-6	Sequence 6, Appl1
442	28	55.3	283	2	US-09-198-452A-492	Sequence 492, App	515	28	58.3	672	2	US-10-069-056-10	Sequence 10, Appl1
443	28	55.3	283	2	US-09-438-185A-462	Sequence 462, App	516	28	58.3	672	2	US-10-069-056-14	Sequence 14, Appl1
444	28	55.3	289	2	US-09-902-540-15857	Sequence 15857, A	517	28	58.3	672	2	US-10-069-056-18	Sequence 18, Appl1
445	28	55.3	290	1	US-08-321-478-9	Sequence 9, Appl1	518	28	58.3	672	2	US-09-252-991A-25571	Sequence 25571, A
446	28	55.3	311	2	US-09-252-991A-30985	Sequence 30985, A	519	28	58.3	681	2	US-09-248-796A-17026	Sequence 17026, A
447	28	55.3	311	2	US-09-583-110-2777	Sequence 2777, Ap	520	28	58.3	684	2	US-09-543-681A-4998	Sequence 4908, Ap
448	28	55.3	312	2	US-10-104-047-2822	Sequence 2822, Ap	521	28	58.3	688	2	US-09-367-206-20	Sequence 20, Appl1
449	28	55.3	327	2	US-09-107-433-4644	Sequence 4644, Ap	522	28	58.3	688	2	US-09-298-404-20	Sequence 20, Appl1
450	28	55.3	332	2	US-09-252-991A-22640	Sequence 22640, A	523	28	58.3	694	2	US-09-252-991A-28808	Sequence 28808, A
451	28	55.3	339	2	US-09-252-991A-21904	Sequence 21904, A	524	28	58.3	694	2	US-09-902-540-10664	Sequence 10664, A
452	28	55.3	341	2	US-09-252-991A-30646	Sequence 30646, A	525	28	58.3	696	2	US-09-438-185A-464	Sequence 464, App
453	28	55.3	362	2	US-09-479-040-11	Sequence 11, Appl1	526	28	58.3	699	2	US-09-489-039A-8133	Sequence 8133, App
454	28	55.3	370	2	US-08-857-076-107	Sequence 107, App	527	28	58.3	703	2	US-09-367-206-5	Sequence 5, Appl1
455	28	55.3	370	2	US-09-205-658-107	Sequence 107, App	528	28	58.3	703	2	US-09-298-404-5	Sequence 5, Appl1
456	28	55.3	375	2	US-09-252-991A-28105	Sequence 28105, A	529	28	58.3	703	4	PCT-US93-06894-9	Sequence 9, Appl1
457	28	55.3	377	1	US-07-863-169A-1	Sequence 1, Appl1	530	28	58.3	757	2	US-09-252-991A-32541	Sequence 32541, A
458	28	55.3	377	1	US-08-429-964-1	Sequence 1, Appl1	531	28	58.3	761	2	US-09-328-352-5942	Sequence 5942, Ap
459	28	55.3	377	1	US-08-969-106-6	Sequence 6, Appl1	532	28	58.3	819	1	US-08-424-268-20	Sequence 20, Appl1
460	28	55.3	377	2	US-07-935-087-1	Sequence 1, Appl1	533	28	58.3	819	4	PCT-US93-10442-20	Sequence 20, Appl1
461	28	55.3	377	2	US-09-054-492B-1	Sequence 1, Appl1	534	28	58.3	887	2	US-09-270-767-46843	Sequence 46843, A
462	28	55.3	377	4	US-09-338-125-6	Sequence 6, Appl1	535	28	58.3	944	2	US-09-252-991A-27230	Sequence 27230, A
463	28	55.3	379	1	US-07-863-169A-5	Sequence 5, Appl1	536	28	58.3	953	2	US-08-375-709-7	Sequence 7, Appl1
464	28	55.3	379	1	US-08-424-268-8	Sequence 8, Appl1	537	28	58.3	970	1	US-08-752-929-7	Sequence 7, Appl1
465	28	55.3	379	1	US-08-424-268-8	Sequence 8, Appl1	538	28	58.3	970	1	US-08-752-929-7	Sequence 7, Appl1

539	28	58.3	970	2	US-09-090-793-5	Sequence 5, Appli	612	27	56.2	127	2	US-08-836-561-103	Sequence 103, App
540	28	58.3	970	2	US-09-231-899-5	Sequence 5, Appli	613	27	56.2	127	2	US-09-434-122-92	Sequence 92, Appl
541	28	58.3	970	2	US-09-902-540-13822	Sequence 13822, A	614	27	56.2	127	2	US-09-434-122-98	Sequence 98, Appl
542	28	58.3	1036	2	US-09-252-991A-27075	Sequence 27075, A	615	27	56.2	127	2	US-09-434-122-103	Sequence 103, App
543	28	58.3	1060	2	US-09-902-540-9866	Sequence 9866, Ap	616	27	56.2	129	2	US-09-830-230A-37	Sequence 37, Appl
544	28	58.3	1196	2	US-10-104-047-2933	Sequence 2933, Ap	617	27	56.2	133	2	US-09-045-764A-11	Sequence 11, Appl
545	28	58.3	1210	1	US-08-484-438-7	Sequence 7, Appli	618	27	56.2	134	2	US-09-045-764A-2	Sequence 2, Appli
546	28	58.3	1210	1	US-08-475-035-4	Sequence 4, Appli	619	27	56.2	134	2	US-09-045-764A-8	Sequence 8, Appli
547	28	58.3	1210	1	US-09-715-249-2	Sequence 2, Appli	620	27	56.2	134	2	US-09-045-764A-9	Sequence 9, Appli
548	28	58.3	1210	2	US-09-723-307-67	Sequence 67, Appl	621	27	56.2	135	2	US-09-045-764A-10	Sequence 10, Appli
549	28	58.3	1240	2	US-09-538-093-12	Sequence 12, Appl	622	27	56.2	135	2	US-09-328-352-883	Sequence 883, Ap
550	28	58.3	1290	2	US-09-107-433-4399	Sequence 4399, Ap	623	27	56.2	136	2	US-09-949-016-8527	Sequence 8527, Ap
551	28	58.3	1367	1	US-09-583-110-5037	Sequence 5037, Ap	624	27	56.2	138	2	US-09-328-352-7643	Sequence 7643, Ap
552	28	58.3	1367	1	US-08-249-687C-2	Sequence 2, Appli	625	27	56.2	140	2	US-09-198-452A-888	Sequence 888, App
553	28	58.3	1367	1	US-08-625-819-2	Sequence 2, Appli	626	27	56.2	146	2	US-09-345-262B-73	Sequence 73, Appl
554	28	58.3	1367	2	US-08-746-559A-2	Sequence 2, Appli	627	27	56.2	147	2	US-09-270-767-0153	Sequence 40153, A
555	28	58.3	1367	2	US-09-343-551-2	Sequence 2, Appli	628	27	56.2	148	1	US-09-270-767-55369	Sequence 55369, Appl
556	28	58.3	1367	2	US-09-949-001-18	Sequence 18, Appl	629	27	56.2	148	1	US-08-256-077-2	Sequence 2, Appli
557	28	58.3	1377	2	US-09-949-001-21	Sequence 21, Appl	630	27	56.2	148	1	US-08-466-137-2	Sequence 2, Appli
558	28	58.3	1392	2	US-09-561-818A-4	Sequence 4, Appli	631	27	56.2	148	2	US-09-172-952-25	Sequence 25, Appl
559	28	58.3	1800	2	US-09-561-818A-8	Sequence 8, Appli	632	27	56.2	155	2	US-09-172-952-25	Sequence 25, Appl
560	28	58.3	1800	2	US-09-561-818A-2	Sequence 2, Appli	633	27	56.2	161	2	US-09-045-764A-4	Sequence 4, Appli
561	28	58.3	1816	2	US-09-561-818A-6	Sequence 6, Appli	634	27	56.2	162	2	US-09-328-352-5250	Sequence 5250, Ap
562	28	58.3	1826	2	US-09-198-452A-113	Sequence 113, App	635	27	56.2	167	2	US-09-134-001C-2867	Sequence 2867, Ap
563	28	58.3	1837	2	US-09-438-185A-98	Sequence 98, Appl	636	27	56.2	168	2	US-09-328-352-4319	Sequence 4319, Ap
564	28	58.3	3340	2	US-09-252-991A-23568	Sequence 23568, A	637	27	56.2	170	2	US-09-948-016-9127	Sequence 9127, Ap
565	28	58.3	3472	2	US-09-408-020-4	Sequence 4, Appli	638	27	56.2	180	2	US-09-214-307A-2	Sequence 2, Appli
566	28	58.3	3829	2	US-09-693-205A-2	Sequence 2, Appli	639	27	56.2	180	2	US-10-054-968-2	Sequence 2, Appli
567	28	58.3	3829	2	US-09-693-205A-16	Sequence 16, Appl	640	27	56.2	183	2	US-09-248-796A-18369	Sequence 18369, A
568	28	58.3	3830	2	US-09-693-205A-4	Sequence 4, Appli	641	27	56.2	184	2	US-09-605-703B-2922	Sequence 2922, Ap
569	28	58.3	4861	2	US-09-919-497-70	Sequence 70, Appli	642	27	56.2	190	2	US-09-270-767-33250	Sequence 33250, A
570	28	58.3	5032	2	US-09-538-092-979	Sequence 979, App	643	27	56.2	192	2	US-10-104-047-2762	Sequence 2762, Ap
571	28	58.3	5037	2	US-09-424-783-4	Sequence 4, Appli	644	27	56.2	193	2	US-09-134-001C-4171	Sequence 4171, Ap
572	27.5	57.3	500	2	US-09-949-016-9623	Sequence 9623, Ap	645	27	56.2	200	2	US-09-270-767-42004	Sequence 42004, A
573	27.5	57.3	582	2	US-08-906-865-3	Sequence 3, Appli	646	27	56.2	202	2	US-09-710-279-2326	Sequence 2326, Ap
574	27.5	57.3	582	2	US-09-129-668-3	Sequence 3, Appli	647	27	56.2	205	2	US-09-248-796A-19681	Sequence 19681, A
575	27	56.2	10	2	US-10-365-908-57	Sequence 57, Appl	648	27	56.2	210	2	US-09-248-796A-2805	Sequence 2805, A
576	27	56.2	19	2	US-09-000-094-50	Sequence 50, Appl	649	27	56.2	212	2	US-09-252-991A-2805	Sequence 2805, A
577	27	56.2	19	2	US-10-011-749-50	Sequence 50, Appl	650	27	56.2	215	2	US-09-248-796A-27992	Sequence 27992, A
578	27	56.2	21	1	US-08-484-635-101	Sequence 101, App	651	27	56.2	218	2	US-09-328-352-7829	Sequence 7829, A
579	27	56.2	21	1	US-08-484-631-101	Sequence 101, App	652	27	56.2	222	2	US-09-248-796A-25885	Sequence 25885, A
580	27	56.2	21	1	US-08-827-570-101	Sequence 101, App	653	27	56.2	225	1	US-09-360-673-8	Sequence 673-8
581	27	56.2	22	1	US-08-484-635-98	Sequence 98, Appl	654	27	56.2	225	1	US-08-805-965-5	Sequence 965-5
582	27	56.2	22	1	US-08-827-570-98	Sequence 98, Appl	655	27	56.2	225	5	US-09-328-352-7842	Sequence 7842
583	27	56.2	33	2	US-09-270-767-57260	Sequence 7260, A	656	27	56.2	227	2	US-09-252-991A-3013	Sequence 3013, A
584	27	56.2	33	2	US-08-466-127-7	Sequence 7, Appli	657	27	56.2	235	2	US-09-134-001C-3026	Sequence 3026, Ap
585	27	56.2	46	1	US-09-621-976-6824	Sequence 6824, Ap	658	27	56.2	236	2	US-09-248-796A-16807	Sequence 16807, A
586	27	56.2	69	2	US-09-513-999C-7121	Sequence 7121, Ap	659	27	56.2	243	2	US-09-543-681A-4208	Sequence 4208, Ap
587	27	56.2	75	2	US-09-489-039A-9194	Sequence 9194, Ap	660	27	56.2	248	1	US-08-805-965-5	Sequence 965-5
588	27	56.2	83	2	US-09-513-999C-7762	Sequence 7762, Ap	661	27	56.2	248	2	US-09-270-767-59167	Sequence 59167
589	27	56.2	83	2	US-09-438-185A-733	Sequence 733, App	662	27	56.2	252	2	US-09-758-755-75	Sequence 755-75
590	27	56.2	90	2	US-09-438-185A-733	Sequence 733, App	663	27	56.2	257	2	US-09-548-472B-13	Sequence 472B-13
591	27	56.2	91	2	US-09-107-532A-3719	Sequence 3719, Ap	664	27	56.2	257	2	US-09-438-185A-828	Sequence 828, App
592	27	56.2	91	2	US-09-489-039A-11103	Sequence 11103, A	665	27	56.2	258	2	US-09-548-472B-12	Sequence 472B-12
593	27	56.2	93	2	US-09-270-767-36028	Sequence 36028, A	666	27	56.2	260	1	US-07-857-224B-23	Sequence 224B-23
594	27	56.2	98	2	US-09-270-767-51245	Sequence 51245, A	667	27	56.2	261	1	US-07-857-224B-22	Sequence 224B-22
595	27	56.2	98	2	US-09-902-540-11819	Sequence 11819, A	668	27	56.2	262	1	US-08-805-965-1	Sequence 965-1
596	27	56.2	98	2	US-09-902-540-11819	Sequence 11819, A	669	27	56.2	263	2	US-09-949-016-8353	Sequence 8353, Appl
597	27	56.2	108	2	US-09-830-230A-37	Sequence 38, Appl	670	27	56.2	265	2	US-09-489-039A-8412	Sequence 8412, Ap
598	27	56.2	110	2	US-09-902-540-12369	Sequence 12369, A	671	27	56.2	271	2	US-09-270-767-32607	Sequence 32607, A
599	27	56.2	113	1	US-08-256-568B-92	Sequence 92, Appl	672	27	56.2	271	2	US-09-270-767-47824	Sequence 47824, A
600	27	56.2	113	2	US-09-038-369B-92	Sequence 92, Appl	673	27	56.2	273	2	US-09-134-000C-4763	Sequence 4763, Ap
601	27	56.2	113	2	US-09-378-900A-92	Sequence 92, Appl	674	27	56.2	274	2	US-09-858-664A-14	Sequence 14, Appl
602	27	56.2	113	2	US-09-899-044-92	Sequence 92, Appl	675	27	56.2	274	2	US-09-543-681A-5366	Sequence 5366, Ap
603	27	56.2	113	2	US-09-878-281A-160	Sequence 160, App	676	27	56.2	274	2	US-10-274-978-15	Sequence 15, Appl
604	27	56.2	113	2	US-09-899-302-92	Sequence 92, Appl	677	27	56.2	274	2	US-10-697-263-15	Sequence 15, Appl
605	27	56.2	113	2	US-09-899-302-92	Sequence 92, Appl	678	27	56.2	284	2	US-09-107-532A-6030	Sequence 6030, App
606	27	56.2	119	1	US-08-256-077-4	Sequence 4, Appli	679	27	56.2	297	2	US-09-198-452A-838	Sequence 838, App
607	27	56.2	119	1	US-08-466-127-4	Sequence 4, Appli	680	27	56.2	297	2	US-09-858-664A-17	Sequence 17, Appl
608	27	56.2	119	2	US-09-045-764A-3	Sequence 3, Appli	681	27	56.2	298	2	US-10-274-978-18	Sequence 18, Appl
609	27	56.2	124	2	US-09-134-000C-5416	Sequence 5416, Ap	682	27	56.2	298	2	US-10-697-263-18	Sequence 18, Appl
610	27	56.2	127	2	US-08-836-561-92	Sequence 92, Appl	683	27	56.2	301	2	US-09-248-796A-19858	Sequence 19858, A
611	27	56.2	127	2	US-08-836-561-98	Sequence 98, Appl	684	27	56.2	301	2	US-09-248-796A-19858	Sequence 19858, A

685	27	56.2	304	2	US-09-438-185A-790	Sequence 790, App	758	27	56.2	511	2	US-08-889-841B-41	Sequence 41, Appl
686	27	56.2	315	2	US-09-248-796A-20438	Sequence 20438, A	759	27	56.2	511	2	US-09-492-739-1	Sequence 1, Appl
687	27	56.2	320	2	US-09-252-991A-30676	Sequence 30676, A	760	27	56.2	511	2	US-09-419-382-41	Sequence 41, Appl
688	27	56.2	328	2	US-09-797-908-6	Sequence 6, Appl	761	27	56.2	511	2	US-09-966-931A-1	Sequence 1, Appl
689	27	56.2	330	2	US-09-710-279-1460	Sequence 1460, Ap	762	27	56.2	519	2	US-08-997-445D-2	Sequence 2, Appl
690	27	56.2	329	2	US-09-252-991A-18388	Sequence 18388, A	763	27	56.2	525	2	US-09-248-796A-19906	Sequence 19906, A
691	27	56.2	331	2	US-09-453-956-3	Sequence 3, Appl	764	27	56.2	527	2	US-09-543-681A-6795	Sequence 6795, Ap
692	27	56.2	331	2	US-10-223-371B-3	Sequence 3, Appl	765	27	56.2	529	2	US-09-252-991A-23395	Sequence 23395, A
693	27	56.2	333	2	US-09-482-273-131	Sequence 131, App	766	27	56.2	529	2	US-09-801-042-2	Sequence 2, Appl
694	27	56.2	337	1	US-08-440-856A-3	Sequence 3, Appl	767	27	56.2	531	2	US-09-949-016-7990	Sequence 7990, Ap
695	27	56.2	340	2	US-09-270-767-45097	Sequence 45097, A	768	27	56.2	533	2	US-09-107-532A-4539	Sequence 4539, Ap
696	27	56.2	344	2	US-09-252-991A-31357	Sequence 31357, A	769	27	56.2	534	2	US-09-270-767-45211	Sequence 45211, A
697	27	56.2	357	2	US-09-270-767-45423	Sequence 45423, A	770	27	56.2	537	2	US-09-110-959A-4	Sequence 4
698	27	56.2	362	2	US-09-328-352-8231	Sequence 8231, Ap	771	27	56.2	539	2	US-10-082-894-3	Sequence 3, Appl
699	27	56.2	363	2	US-09-902-540-15611	Sequence 15611, A	772	27	56.2	543	2	US-09-107-532A-7235	Sequence 7235, Ap
700	27	56.2	366	2	US-09-107-433-5158	Sequence 5158, Ap	773	27	56.2	546	2	US-09-252-991A-23291	Sequence 23291, A
701	27	56.2	375	2	US-09-000-094-22	Sequence 22, Appl	774	27	56.2	548	2	US-09-207-388-23	Sequence 23, Appl
702	27	56.2	375	2	US-10-011-749-22	Sequence 22, Appl	775	27	56.2	558	2	US-09-902-540-11142	Sequence 11142, A
703	27	56.2	378	2	US-09-270-767-33028	Sequence 33028, A	776	27	56.2	559	1	US-08-756-317-7	Sequence 7
704	27	56.2	378	2	US-09-270-767-47245	Sequence 47245, A	777	27	56.2	559	1	US-09-052-339-1	Sequence 1, Appl
705	27	56.2	387	2	US-09-248-796A-18228	Sequence 18228, A	778	27	56.2	559	2	US-09-385-742B-1	Sequence 1, Appl
706	27	56.2	388	2	US-10-138-701-57	Sequence 57, Appl	779	27	56.2	559	2	US-09-989-786-1	Sequence 1, Appl
707	27	56.2	388	2	US-09-940-921B-7	Sequence 7, Appl	780	27	56.2	559	2	US-10-253-509-1	Sequence 1, Appl
708	27	56.2	390	2	US-09-543-681A-7466	Sequence 7466, Ap	781	27	56.2	559	2	US-10-133-405-1	Sequence 1, Appl
709	27	56.2	395	2	US-09-134-000C-5115	Sequence 5115, Ap	782	27	56.2	559	2	US-09-807-123-2	Sequence 2, Appl
710	27	56.2	398	2	US-09-248-796A-15060	Sequence 15060, A	783	27	56.2	559	2	US-10-133-402-1	Sequence 1, Appl
711	27	56.2	398	2	US-09-940-921B-9	Sequence 9, Appl	784	27	56.2	559	2	US-10-191-540-1	Sequence 1, Appl
712	27	56.2	399	2	US-09-328-352-7632	Sequence 7632, Ap	785	27	56.2	565	2	US-09-489-039A-10676	Sequence 10676, A
713	27	56.2	408	2	US-09-489-039A-12510	Sequence 12510, A	786	27	56.2	567	2	US-09-347-878-42	Sequence 42, Appl
714	27	56.2	408	2	US-09-270-767-44261	Sequence 44261, A	787	27	56.2	568	2	US-09-207-388-22	Sequence 22, Appl
715	27	56.2	410	2	US-10-272-490-24	Sequence 24, Appl	788	27	56.2	568	2	US-09-207-388-24	Sequence 24, Appl
716	27	56.2	414	2	US-09-858-664A-13	Sequence 13, Appl	789	27	56.2	575	2	US-09-927-267-1	Sequence 1, Appl
717	27	56.2	414	2	US-10-274-978-14	Sequence 14, Appl	790	27	56.2	575	2	US-09-927-267-16	Sequence 16, Appl
718	27	56.2	414	2	US-10-697-263-14	Sequence 14, Appl	791	27	56.2	577	2	US-09-248-796A-20486	Sequence 20486, A
719	27	56.2	415	2	US-09-252-991A-33056	Sequence 33056, A	792	27	56.2	582	2	US-09-252-991A-32678	Sequence 32678, A
720	27	56.2	415	2	US-09-359-268A-25	Sequence 25, Appl	793	27	56.2	587	2	US-09-020-465-2	Sequence 2, Appl
721	27	56.2	417	2	US-10-245-227D-14	Sequence 14, Appl	794	27	56.2	589	2	US-09-270-767-45378	Sequence 45378, A
722	27	56.2	425	2	US-09-902-540-15834	Sequence 15834, A	795	27	56.2	592	2	US-09-408-020-80	Sequence 80, Appl
723	27	56.2	425	2	US-10-245-227D-12	Sequence 12, Appl	796	27	56.2	596	2	US-09-797-039-8	Sequence 8, Appl
724	27	56.2	428	2	US-09-270-767-60705	Sequence 60705, A	797	27	56.2	600	2	US-08-537-361B-9	Sequence 9, Appl
725	27	56.2	430	2	US-10-245-227D-1	Sequence 1, Appl	798	27	56.2	601	1	US-08-606-288-7	Sequence 7, Appl
726	27	56.2	439	2	US-09-489-039A-10095	Sequence 10095, A	799	27	56.2	601	1	US-08-606-288-10	Sequence 10, Appl
727	27	56.2	443	2	US-09-902-540-16800	Sequence 16800, A	800	27	56.2	601	2	US-09-347-483-7	Sequence 7, Appl
728	27	56.2	443	2	US-10-245-227D-89	Sequence 89, Appl	801	27	56.2	601	2	US-09-347-483-10	Sequence 10, Appl
729	27	56.2	449	2	US-10-245-227D-91	Sequence 91, Appl	802	27	56.2	602	2	US-08-990-470A-3	Sequence 3, Appl
730	27	56.2	449	2	US-10-245-227D-93	Sequence 93, Appl	803	27	56.2	602	2	US-08-917-707-9	Sequence 9, Appl
731	27	56.2	449	2	US-10-245-227D-95	Sequence 95, Appl	804	27	56.2	615	2	US-09-849-016-11320	Sequence 11320, A
732	27	56.2	449	2	US-10-245-227D-97	Sequence 97, Appl	805	27	56.2	623	2	US-09-270-767-45228	Sequence 45228, A
733	27	56.2	452	2	US-09-248-796A-16171	Sequence 16171, A	806	27	56.2	632	2	US-09-354-129-8	Sequence 8, Appl
734	27	56.2	456	1	US-08-624-125-20	Sequence 20, Appl	807	27	56.2	632	2	US-09-504-357-8	Sequence 8, Appl
735	27	56.2	456	2	US-08-937-155-20	Sequence 20, Appl	808	27	56.2	634	1	US-09-020-466-2	Sequence 2, Appl
736	27	56.2	458	2	US-09-270-767-43768	Sequence 43768, A	809	27	56.2	634	2	US-09-192-659-2	Sequence 2, Appl
737	27	56.2	460	2	US-09-270-767-60881	Sequence 60881, A	810	27	56.2	635	2	US-09-538-092-226	Sequence 226, App
738	27	56.2	465	2	US-09-000-094-24	Sequence 24, Appl	811	27	56.2	637	2	US-09-489-039A-13368	Sequence 13268, A
739	27	56.2	465	2	US-10-011-749-24	Sequence 24, Appl	812	27	56.2	646	2	US-09-489-039A-12750	Sequence 12750, A
740	27	56.2	475	2	US-09-902-540-14917	Sequence 14917, A	813	27	56.2	649	2	US-09-902-540-11282	Sequence 11282, A
741	27	56.2	477	2	US-09-134-000C-4388	Sequence 4388, Ap	814	27	56.2	650	2	US-09-252-991A-24993	Sequence 24093, A
742	27	56.2	481	2	US-09-248-796A-19010	Sequence 19010, A	815	27	56.2	650	2	US-09-467-558B-40	Sequence 40, App
743	27	56.2	485	2	US-09-489-039A-10167	Sequence 10167, A	816	27	56.2	651	2	US-09-248-796A-18051	Sequence 18051, A
744	27	56.2	488	2	US-09-902-540-15686	Sequence 15686, A	817	27	56.2	666	2	US-09-248-796A-14824	Sequence 14824, A
745	27	56.2	498	2	US-09-323-998E-57	Sequence 57, Appl	818	27	56.2	666	2	US-09-270-767-62249	Sequence 62249, A
746	27	56.2	500	2	US-09-323-998E-58	Sequence 58, Appl	819	27	56.2	682	2	US-10-104-047-2390	Sequence 2390, Ap
747	27	56.2	500	2	US-09-323-998E-59	Sequence 59, Appl	820	27	56.2	708	2	US-09-107-532A-6047	Sequence 6047, Ap
748	27	56.2	501	1	US-08-448-603A-2	Sequence 2, Appl	821	27	56.2	721	2	US-09-270-767-46645	Sequence 46645, A
749	27	56.2	501	2	US-09-134-0739-2	Sequence 2, Appl	822	27	56.2	735	2	US-09-902-540-14243	Sequence 14243, A
750	27	56.2	501	2	US-09-492-739-2	Sequence 2, Appl	823	27	56.2	752	2	US-09-248-796A-15445	Sequence 15445, A
751	27	56.2	501	2	US-09-966-931A-2	Sequence 2, Appl	824	27	56.2	758	2	US-09-198-452A-996	Sequence 996, App
752	27	56.2	502	2	US-09-323-998E-56	Sequence 56, Appl	825	27	56.2	758	1	US-08-677-862-2	Sequence 2, Appl
753	27	56.2	508	2	US-09-858-664A-18	Sequence 18, Appl	826	27	56.2	763	1	US-08-677-862-2	Sequence 2, Appl
754	27	56.2	508	2	US-10-274-978-19	Sequence 19, Appl	827	27	56.2	763	1	US-09-252-571-2	Sequence 2, Appl
755	27	56.2	508	2	US-10-697-263-19	Sequence 19, Appl	828	27	56.2	763	1	US-09-434-065-2	Sequence 2, Appl
756	27	56.2	511	1	US-08-448-603A-1	Sequence 1, Appl	829	27	56.2	763	2	US-08-789-275-4	Sequence 4, Appl
757	27	56.2	511	2	US-09-134-0735-1	Sequence 1, Appl	830	27	56.2	763	2	US-08-789-275-5	Sequence 5, Appl

831	27	56.2	770	2	US-09-489-039A-7872	Sequence 7872, Ap	904	27	56.2	4928	2	US-09-036-987A-5	Sequence 5, Appl1
832	27	56.2	775	2	US-09-991-181-326	Sequence 326, App	905	27	56.2	4928	2	US-09-370-700-5	Sequence 5, Appl1
833	27	56.2	775	2	US-09-990-444-326	Sequence 326, App	906	27	56.2	4928	2	US-09-603-207-5	Sequence 5, Appl1
834	27	56.2	775	2	US-09-997-333-326	Sequence 326, App	907	27	56.2	7257	2	US-09-335-409-5	Sequence 5, Appl1
835	27	56.2	775	2	US-09-992-598-326	Sequence 326, App	908	27	56.2	7257	2	US-09-568-102-5	Sequence 5, Appl1
836	27	56.2	792	2	US-09-902-540-1813	Sequence 12, Appl	909	27	56.2	7257	2	US-09-567-969-5	Sequence 5, Appl1
837	27	56.2	798	2	US-09-861-451A-12	Sequence 12, Appl	910	27	56.2	7257	2	US-09-568-480-5	Sequence 5, Appl1
838	27	56.2	799	2	US-09-165-396-4	Sequence 4, Appl1	911	27	56.2	7257	2	US-09-568-422-5	Sequence 5, Appl1
839	27	56.2	802	2	US-09-252-991A-17830	Sequence 17830, A	912	27	56.2	7257	2	US-09-567-899-5	Sequence 5, Appl1
840	27	56.2	837	2	US-09-583-110-3152	Sequence 3152, Ap	913	27	56.2	7257	2	US-10-014-717-5	Sequence 5, Appl1
841	27	56.2	851	2	US-09-107-433-3160	Sequence 3160, Ap	914	27	55.2	290	2	US-09-489-039A-10777	Sequence 10777, A
842	27	56.2	853	2	US-09-489-039A-11009	Sequence 11009, A	915	26.5	55.2	741	2	US-09-605-703B-1584	Sequence 1584, A
843	27	56.2	877	1	US-08-907-166-8	Sequence 8, Appl1	916	26	55.2	9	1	US-08-787-547-105	Sequence 105, App
844	27	56.2	877	1	US-09-391-340-8	Sequence 8, Appl1	917	26	54.2	9	2	US-08-197-484-69	Sequence 69, App
845	27	56.2	884	1	US-08-066-167-2	Sequence 2, Appl1	918	26	54.2	9	2	US-10-365-908-4	Sequence 4, Appl1
846	27	56.2	908	1	US-08-487-890A-94	Sequence 94, Appl1	919	26	54.2	9	2	US-10-365-908-4	Sequence 26, Appl1
847	27	56.2	908	1	US-08-478-435-94	Sequence 94, Appl1	920	26	54.2	9	4	PCT-US95-02121-69	Sequence 69, Appl1
848	27	56.2	908	1	US-08-337-483-94	Sequence 94, Appl1	921	26	54.2	10	1	US-08-594-447-21	Sequence 21, Appl1
849	27	56.2	908	1	US-08-478-373-94	Sequence 94, Appl1	922	26	54.2	10	1	US-08-541-964-20	Sequence 20, Appl1
850	27	56.2	908	2	US-08-474-671-94	Sequence 94, Appl1	923	26	54.2	10	1	US-08-665-647-35	Sequence 35, Appl1
851	27	56.2	908	2	US-08-483-577A-94	Sequence 94, Appl1	924	26	54.2	10	1	US-08-665-647-35	Sequence 49, Appl1
852	27	56.2	908	2	US-08-448-194-4	Sequence 4, Appl1	925	26	54.2	18	1	US-07-916-235A-4	Sequence 4, Appl1
853	27	56.2	908	2	US-08-613-009A-16	Sequence 16, Appl1	926	26	54.2	18	1	US-07-916-235A-13	Sequence 13, Appl1
854	27	56.2	908	2	US-08-897-438-94	Sequence 94, Appl1	927	26	54.2	21	1	US-08-484-635-159	Sequence 159, App
855	27	56.2	908	2	US-08-867-921-4	Sequence 4, Appl1	928	26	54.2	21	1	US-08-484-631-159	Sequence 159, App
856	27	56.2	908	2	US-08-637-654-94	Sequence 94, Appl1	929	26	54.2	21	1	US-08-827-570-159	Sequence 159, App
857	27	56.2	908	2	US-08-649-518-94	Sequence 94, Appl1	930	26	54.2	21	1	US-09-902-540-11804	Sequence 11804, A
858	27	56.2	908	2	US-08-778-570B-22	Sequence 22, Appl1	931	26	54.2	37	2	US-09-466-127-9	Sequence 9, Appl1
859	27	56.2	908	2	US-09-059-584-22	Sequence 22, Appl1	932	26	54.2	46	1	US-09-270-767-34420	Sequence 4420, A
860	27	56.2	908	2	US-08-753-750B-12	Sequence 12, Appl1	933	26	54.2	56	2	US-09-270-767-49637	Sequence 49637, A
861	27	56.2	909	1	US-08-363-124A-4	Sequence 4, Appl1	934	26	54.2	56	2	US-09-823-129-51	Sequence 51, Appl1
862	27	56.2	917	2	US-09-248-796A-18960	Sequence 18960, A	935	26	54.2	57	2	US-09-823-129-51	Sequence 26335, A
863	27	56.2	964	2	US-09-962-955D-39	Sequence 39, Appl1	936	26	54.2	63	2	US-09-248-796A-66435	Sequence 6435, Ap
864	27	56.2	974	2	US-09-252-991A-23640	Sequence 23640, A	937	26	54.2	64	2	US-09-513-999C-6245	Sequence 4690, Ap
865	27	56.2	982	2	US-09-352-991A-24820	Sequence 24824, A	938	26	54.2	64	2	US-09-583-110-4690	Sequence 4690, A
866	27	56.2	998	2	US-09-452-991A-28424	Sequence 8326, Ap	939	26	54.2	71	2	US-09-248-796A-25788	Sequence 25788, A
867	27	56.2	998	2	US-09-949-016-8326	Sequence 81530, A	940	26	54.2	74	2	US-09-621-976-4698	Sequence 4698, Ap
868	27	56.2	1066	2	US-09-252-991A-31530	Sequence 1074, Ap	941	26	54.2	74	2	US-09-270-767-45951	Sequence 55951, A
869	27	56.2	1147	2	US-09-538-092-1074	Sequence 1074, Ap	942	26	54.2	82	2	US-09-621-976-5109	Sequence 2884, Ap
870	27	56.2	1194	2	US-10-191-029-10	Sequence 10, Appl	943	26	54.2	82	2	US-09-270-767-58791	Sequence 58791, A
871	27	56.2	1199	2	US-09-134-000C-5542	Sequence 5542, Ap	944	26	54.2	106	2	US-09-107-433-2884	Sequence 5107, A
872	27	56.2	1216	2	US-09-583-110-3824	Sequence 3824, Ap	945	26	54.2	107	1	US-08-015-968A-5	Sequence 5, Appl1
873	27	56.2	1216	2	US-09-769-787-12	Sequence 12, Appl	946	26	54.2	107	1	US-08-446-365-5	Sequence 36147, A
874	27	56.2	1224	2	US-09-107-433-4347	Sequence 4347, Ap	947	26	54.2	111	2	US-09-270-767-38147	Sequence 53344, A
875	27	56.2	1228	2	US-09-463-402-2	Sequence 2, Appl1	948	26	54.2	111	2	US-09-270-767-53364	Sequence 1599, Ap
876	27	56.2	1228	2	US-09-889-572-2	Sequence 2, Appl1	949	26	54.2	113	2	US-09-471-276-1598	Sequence 7392, Ap
877	27	56.2	1228	2	US-09-117-447-2	Sequence 18, Appl1	950	26	54.2	116	2	US-09-621-976-7392	Sequence 9, Appl1
878	27	56.2	1280	2	US-09-377-285B-18	Sequence 18, Appl1	951	26	54.2	120	1	US-08-886-863-9	Sequence 9, Appl1
879	27	56.2	1280	2	US-10-192-381-18	Sequence 2, Appl1	952	26	54.2	120	1	US-09-175-229-9	Sequence 9, Appl1
880	27	56.2	1337	2	US-09-196-387-2	Sequence 2, Appl1	953	26	54.2	120	2	PCT-US95-06764-9	Sequence 9, Appl1
881	27	56.2	1337	2	US-09-841-835-2	Sequence 8, Appl1	954	26	54.2	120	4	US-09-513-999C-7079	Sequence 7079, Ap
882	27	56.2	1337	2	US-09-972-115A-8	Sequence 2, Appl1	955	26	54.2	125	2	US-09-270-767-36204	Sequence 36204, A
883	27	56.2	1337	2	US-10-098-108-2	Sequence 18, Appl1	956	26	54.2	127	2	US-09-270-767-43790	Sequence 43790, A
884	27	56.2	1367	2	US-08-864-641B-18	Sequence 24, Appl1	957	26	54.2	134	2	US-09-270-767-43790	Sequence 22394, A
885	27	56.2	1404	2	US-09-345-473B-24	Sequence 24, Appl1	958	26	54.2	134	2	US-09-248-796A-22394	Sequence 3319, Ap
886	27	56.2	1404	2	US-09-862-027-24	Sequence 18103, A	959	26	54.2	138	2	US-09-134-001C-3319	Sequence 4308, Ap
887	27	56.2	1405	2	US-09-248-796A-18103	Sequence 46, Appl1	960	26	54.2	140	2	US-09-107-433-2884	Sequence 5177, Ap
888	27	56.2	1587	2	US-09-000-094-46	Sequence 46, Appl1	961	26	54.2	142	2	US-09-763-932A-7	Sequence 6, Appl1
889	27	56.2	1587	2	US-10-011-749-46	Sequence 11, Appl1	962	26	54.2	146	1	US-08-678-369-6	Sequence 7, Appl1
890	27	56.2	1588	4	PCT-US93-07261-11	Sequence 11, Appl1	963	26	54.2	146	2	US-08-688-908-4	Sequence 41, Appl1
891	27	56.2	1663	4	PCT-US93-07261-11	Sequence 16, Appl1	964	26	54.2	146	2	US-09-914-375C-41	Sequence 3, Appl1
892	27	56.2	1709	2	US-09-949-016-10503	Sequence 10503, A	965	26	54.2	146	2	US-09-200-913-3	Sequence 86, Appl1
893	27	56.2	1911	1	US-08-348-006B-5	Sequence 5, Appl1	966	26	54.2	147	2	US-09-183-861-86	Sequence 86, Appl1
894	27	56.2	1911	1	US-08-800-825A-5	Sequence 5, Appl1	967	26	54.2	149	2	US-09-022-765-86	Sequence 86, Appl1
895	27	56.2	1911	1	US-09-158-657-5	Sequence 5, Appl1	968	26	54.2	149	2	US-09-551-974A-86	Sequence 86, Appl1
896	27	56.2	1911	4	PCT-US94-10166-5	Sequence 92, Appl1	969	26	54.2	149	2		
897	27	56.2	1953	2	US-09-917-254-92	Sequence 48, Appl1	970	26	54.2	149	2		
898	27	56.2	2475	2	US-09-413-814-48	Sequence 2, Appl1	971	26	54.2	149	2		
899	27	56.2	2860	1	US-08-826-267-2	Sequence 8, Appl1	972	26	54.2	149	2		
900	27	56.2	3413	2	US-10-042-665A-8	Sequence 10853, A	973	26	54.2	149	2		
901	27	56.2	3838	2	US-09-949-016-10853	Sequence 5, Appl1	974	26	54.2	149	2		
902	27	56.2	3969	2	US-08-061-376-5	Sequence 1262, Ap	975	26	54.2	149	2		
903	27	56.2	3969	2	US-09-538-092-1262		976	26	54.2	149	2		

977 26 54.2 149 2 US-09-565-501A-86
978 26 54.2 149 2 US-09-639-206A-86
979 26 54.2 149 2 US-09-874-923-86
980 26 54.2 150 2 US-09-902-540-10700
981 26 54.2 156 2 US-09-771-161A-104
982 26 54.2 161 2 US-09-543-681A-5258
983 26 54.2 167 2 US-08-759-628-3
984 26 54.2 168 2 US-10-104-047-2698
985 26 54.2 171 2 US-09-252-991A-27140
986 26 54.2 172 2 US-09-134-001C-4222
987 26 54.2 177 2 US-09-134-001C-4696
988 26 54.2 177 2 US-09-902-540-13481
989 26 54.2 179 2 US-09-248-796A-17828
990 26 54.2 180 2 US-09-198-452A-741
991 26 54.2 180 2 US-09-248-796A-20002
992 26 54.2 181 2 US-09-438-185A-701
993 26 54.2 183 2 US-09-270-767-31817
994 26 54.2 183 2 US-09-270-767-47034
995 26 54.2 193 2 US-09-830-230A-86
996 26 54.2 192 2 US-09-107-532A-5752
997 26 54.2 192 2 US-09-270-767-33147
998 26 54.2 192 2 US-09-270-767-48364
999 26 54.2 195 2 US-09-640-211A-2119
1000 26 54.2 201 2 US-09-252-991A-16826

ALIGNMENTS

RESULT 1
US-08-787-547-104
; Sequence 104, Application US/08787547
; Patent No. 5783367
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Curley, Joanne M.
; APPLICANT: Langer, Robert S.
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY
; TITLE OF INVENTION: OF NUCLEIC ACID
; NUMBER OF SEQUENCES: 107
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/787,547
; FILING DATE: 22-JAN-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Frazer, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 104:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

Sequence 86, Appl
Sequence 86, Appl
Sequence 86, Appl
Sequence 10700, A
Sequence 104, Appl
Sequence 5258, Ap
Sequence 3, Appl
Sequence 2698, Ap
Sequence 27140, A
Sequence 4222, Ap
Sequence 4696, Ap
Sequence 13481, A
Sequence 17828, A
Sequence 741, Appl
Sequence 20002, A
Sequence 701, Appl
Sequence 31817, A
Sequence 47034, A
Sequence 86, Appl
Sequence 5752, Ap
Sequence 33147, A
Sequence 48364, A
Sequence 2119, Ap
Sequence 16826, A

US-08-787-547-104

Query Match 100.0%; Score 48; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLPET 9
Db 1 YMLDLPET 9

RESULT 2
US-08-948-378A-17
; Sequence 17, Application US/08948378A
; Patent No. 6013258
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
; TITLE OF INVENTION: THE HPV E7 PROTEIN
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/948,378A
; FILING DATE: 09-OCT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Frazer, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-948-378A-17

Query Match 100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLPET 9
Db 1 YMLDLPET 9

RESULT 3
US-09-169-425C-17
; Sequence 17, Application US/09169425C
; Patent No. 6183746
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.

```

; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 66/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-169-425C-17

Query Match      100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLOPET 9
DB      1 YMLDLOPET 9

RESULT 4
US-08-197-484-66
; Sequence 66, Application US/08197484
; Patent No. 641931
; GENERAL INFORMATION:
; APPLICANT: VITIELLO, Maria A.
; APPLICANT: CHESTNUT, Robert W.
; APPLICANT: SETTE, Alessandro D.
; APPLICANT: CELIS, Estebean
; APPLICANT: GRAY, Howard
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; TITLE OF INVENTION: CTL IMMUNITY
; NUMBER OF SEQUENCES: 153
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Kourie and Crew
; STREET: Stuart Street Tower, One Market Plaza
; CITY: San Francisco
; STATE: California
; COUNTRY: US
; ZIP: 94105-1493
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

```

```

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/197,484
; FILING DATE: 16-FEB-1994
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/935,811
; FILING DATE: 26-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/874,491
; FILING DATE: 27-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/749,568
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 14137-26-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 467-9600
; TELEFAX: (206) 623-6793
; INFORMATION FOR SEQ ID NO: 66:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; US-08-197-484-66

Query Match      100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLOPET 9
DB      1 YMLDLOPET 9

RESULT 5
US-09-759-960-17
; Sequence 17, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.

```

```

;
;   REGISTRATION NUMBER: 34,819
;   REFERENCE/DOCKET NUMBER: 08191/004002
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 617-542-5070
;   TELEFAX: 617-543-8906
;   TELEX: 200154
;   INFORMATION FOR SEQ ID NO: 17:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 9 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
;   MOLECULE TYPE: peptide
;   US-09-759-960-17

Query Match      100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLOPET 9
DB      1 YMLDLOPET 9

RESULT 6
US-10-365-908-3
; Sequence 3, Application US/10365908
; Patent No. 6797491
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
; US-10-365-908-3

Query Match      100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLOPET 9
DB      1 YMLDLOPET 9

RESULT 7
PCT-US95-02121-66
; Sequence 66, Application PC/TUS9502121
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; TITLE OF INVENTION: CTL IMMUNITY
; NUMBER OF SEQUENCES: 153
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/02121
```

```

;   FILING DATE: 16-FEB-1995
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 08/197,484
;   FILING DATE: 16-FEB-1994
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 07/935,811
;   FILING DATE: 26-AUG-1992
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 07/874,491
;   FILING DATE: 27-APR-1992
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 07/827,682
;   FILING DATE: 29-JAN-1992
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 07/749,568
;   FILING DATE: 26-AUG-1991
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Parmelee, Steven W.
;   REGISTRATION NUMBER: 31,990
;   REFERENCE/DOCKET NUMBER: 14137-26-4PC
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 467-9600
;   TELEFAX: (415) 543-5043
;   INFORMATION FOR SEQ ID NO: 66:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 9 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: unknown
;   TOPOLOGY: unknown
;   MOLECULE TYPE: peptide
;   PCT-US95-02121-66
```

```

Query Match      100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 YMLDLOPET 9
DB      1 YMLDLOPET 9
```

```

RESULT 8
US-08-902-516-19
; Sequence 19, Application US/08902516
; Patent No. 5891432
; GENERAL INFORMATION:
; APPLICANT: Soo Hoo, William
; TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
; TITLE OF INVENTION: COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
; NUMBER OF SEQUENCES: 50
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CAMPBELL & FLORES, LLP
; STREET: 4370 La Jolla Village Drive, Suite 700
; CITY: San Diego
; STATE: California
; COUNTRY: United States
; ZIP: 92121
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/902,516
; FILING DATE: 29-JUL-1997
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Campbell, Cathryn A.
; REGISTRATION NUMBER: 31,815
; REFERENCE/DOCKET NUMBER: P-IM 2442
; TELECOMMUNICATION INFORMATION:
```

TELEPHONE: (619)535-9001
TELEFAX: (619)535-8949
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-902-516-19

Query Match 100.0%; Score 48; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
DB 1 YMLDQPET 9

RESULT 9
US-08-704-344-22
Sequence 22, Application US/08704344
Patent No. 6218363

GENERAL INFORMATION:
APPLICANT: BASERGA, Renato L.
APPLICANT: RESNICOFF, Mariana
APPLICANT: HUANG, Ziwei
TITLE OF INVENTION: MHC PEPTIDES AND METHODS OF USE
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: HALE AND DORR LLP
STREET: 1455 Pennsylvania Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/704,344
FILING DATE: 28-AUG-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: WIXON, Henry N.
REGISTRATION NUMBER: 32,073
REFERENCE/DOCKET NUMBER: 104322.196
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 942-8459
TELEFAX: (202) 942-8484
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-704-344-22

Query Match 100.0%; Score 48; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
DB 1 YMLDQPET 9

RESULT 10

US-09-847-185-19
Sequence 19, Application US/09847185
Patent No. 6482407

GENERAL INFORMATION:
APPLICANT: Soo Hoo, William
TITLE OF INVENTION: MEMBERANE-BOUND CYTOKINE COMPOSITIONS
COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
RESPONSE USING SAME

NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS:
ADDRESSEE: CAMPBELL & FLORES, LLP
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUNTRY: United States
ZIP: 92121

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/847,185
FILING DATE: 01-May-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/201,931
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-1M 2442
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)535-8949
TELEFAX: (619)535-8949

INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-09-847-185-19

Query Match 100.0%; Score 48; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
DB 1 YMLDQPET 9

RESULT 11
US-09-601-729-270
Sequence 270, Application US/09601729
Patent No. 6683052

GENERAL INFORMATION:
APPLICANT: THIAM, KADER
APPLICANT: AURIAULT, CLAUDE
APPLICANT: GRAS-MASSE, HELENE
APPLICANT: LOING, ESTELLE
APPLICANT: VERMAERDE, CLAUDIE
APPLICANT: GUILLET, JEAN GERARD
TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USES
FILE REFERENCE: USB-97-AU-IN
CURRENT APPLICATION NUMBER: US/09/601,729
CURRENT FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: PCT/FR99/00259
PRIOR FILING DATE: 1999-02-05
PRIOR APPLICATION NUMBER: 98 01439
PRIOR FILING DATE: 1998-02-06

NUMBER OF SEQ ID NOS: 281
SOFTWARE: Patentn Ver. 2.1
SEQ ID NO: 270
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-601-729-270

Query Match 100.0%; Score 48; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLPET 9
DB 1 YMLDLPET 9

RESULT 12
US-09-980-177A-19
Sequence 19, Application US/09980177A
Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Joachim, Ingrid
TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus IL-Protein and Use thereof in Diagnosis and
FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/09/980,177A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO: 19
LENGTH: 10
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-980-177A-19

Query Match 100.0%; Score 48; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLPET 9
DB 1 YMLDLPET 9

RESULT 13
US-08-075-541D-35
Sequence 35, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 35:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-35

Query Match 100.0%; Score 48; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.0052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLPET 9
DB 3 YMLDLPET 11

RESULT 14
US-08-934-915-46
Sequence 46, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILNER, JOAKIM
APPLICANT: DILNER, LENA
APPLICANT: CHENG, HWE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch

REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-46

Query Match 100.0%; Score 48; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
Db 10 YMLDLOPET 18

RESULT 15
US-08-075-541D-43
Sequence 43, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMALIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2291
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-43

Query Match 100.0%; Score 48; DB 2; Length 20;

Best Local Similarity 100.0%; Pred. No. 0.0059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
Db 11 YMLDLOPET 19

RESULT 16
US-08-075-541D-44
Sequence 44, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMALIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2291
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-44

Query Match 100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
Db 6 YMLDLOPET 14

RESULT 17
US-09-980-177A-69
Sequence 69, Application US/09980177A
Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Jochmus, Ingrid
APPLICANT: Nieland, John

```

; TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/09/980,177A
; PRIOR FILING DATE: 2001-11-29
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 69
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-980-177A-69

Query Match      100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLPET 9
        |||||
        11 YMLDLPET 19

Db
RESULT 18
US-09-980-523A-14
; Sequence 14, Application US/09980523A
; Patent No. 6783763
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCES
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7
; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: MOBI NO INS
; CURRENT APPLICATION NUMBER: US/09/980,523A
; PRIOR FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: PCT/FR00/01513
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: FR 99/07012
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 14
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-09-980-523A-14

Query Match      100.0%; Score 48; DB 2; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.0068;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLPET 9
        |||||
        9 YMLDLPET 17

Db
RESULT 19
US-08-363-586-1
; Sequence 1, Application US/08363586
; Patent No. 5629161
; GENERAL INFORMATION:
; APPLICANT: Mueller, Martin
; APPLICANT: Giesmann, Lutz
; TITLE OF INVENTION: Use of HPV-16 E6 and E7-Gene Derived
; TITLE OF INVENTION: Peptides for the Diagnostic Purpose
```

```

; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Flinnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/363,586
; FILING DATE: 23-DEC-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/909,296
; FILING DATE: 09-JUL-1992
; APPLICATION NUMBER: EP 9111720.8
; FILING DATE: 13-JUL-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Madler, Linda A.
; REGISTRATION NUMBER: 33,218
; REFERENCE/DOCKET NUMBER: 02481-1195-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-408-4000
; TELEFAX: 202-408-4000
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-363-586-1

Query Match      100.0%; Score 48; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.0091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDLPET 9
        |||||
        6 YMLDLPET 14

Db
RESULT 20
US-08-934-915-51
; Sequence 51, Application US/08934915
; Patent No. 5932412
; GENERAL INFORMATION:
; APPLICANT: DILLNER, JOAKIM
; APPLICANT: DILLNER, LENA
; APPLICANT: CHENG, HWEE-MING
; TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
; TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
; TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
; TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
; NUMBER OF SEQUENCES: 193
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MASON & ASSOCIATES, P.A.
; STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
; CITY: CLEARWATER
; STATE: FLORIDA
; COUNTRY: U.S.A.
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Windows 3.0
; SOFTWARE: Microsoft Word 6.0
; CURRENT APPLICATION DATA:
```


APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 51:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-51

Query Match 100.0%; Score 48; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.0091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||||
Db 10 YMLDLOPET 18

RESULT 21
US-09-486-394-1
Sequence 1, Application US/09486394
Patent No. 6478749
GENERAL INFORMATION:
APPLICANT: Hoffl, Reinhard
TITLE OF INVENTION: Diagnostic Kit for Skin Tests, and Method
FILE REFERENCE: 032929-001
CURRENT APPLICATION NUMBER: US/09/486,394
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/04773
PRIOR FILING DATE: 1998-07-30
PRIOR APPLICATION NUMBER: DE 197 37 409.3
PRIOR FILING DATE: 1997-08-27
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 30
TYPE: PRT
ORGANISM: Human papillomavirus type 16
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(30)
OTHER INFORMATION: E7 peptide.
US-09-486-394-1

Query Match 100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.0091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||||
Db 11 YMLDLOPET 19

RESULT 22
US-09-828-645-3
Sequence 3, Application US/09828645
Patent No. 6743593
GENERAL INFORMATION:
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus

FILE REFERENCE: 146-1-002
CURRENT APPLICATION NUMBER: US/09/828,645
CURRENT FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: US 60/194,796
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 30
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-3

Query Match 100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.0091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||||
Db 6 YMLDLOPET 14

RESULT 23
US-09-828-645-7
Sequence 7, Application US/09828645
Patent No. 6743593
GENERAL INFORMATION:
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
FILE REFERENCE: 146-1-002
CURRENT APPLICATION NUMBER: US/09/828,645
CURRENT FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: US 60/194,796
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
LENGTH: 30
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derived from the E7 early region of HPV-16
NAME/KEY: misc_feature
LOCATION: (19)..(19)
OTHER INFORMATION: Xaa = L-carboxymethylcysteine
US-09-828-645-7

Query Match 100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.0091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||||
Db 6 YMLDLOPET 14

RESULT 24
US-09-390-027-6
Sequence 6, Application US/09390027
Patent No. 6235523
GENERAL INFORMATION:
APPLICANT: GAJEWICZYK, Diane M.
APPLICANT: PERSSON, Roy
APPLICANT: YAO, Fei-Long
APPLICANT: CAO, Shi-Xian
APPLICANT: KLEIN, Michael H.
APPLICANT: TARTAGLIA, James
APPLICANT: MOINGEON, Philippe
APPLICANT: ROVINSKI, Benjamin
TITLE OF INVENTION: TREATMENT OF CERVICAL CANCER
FILE REFERENCE: 1038-982 MIS:jdb

;; CURRENT APPLICATION NUMBER: US/09/390,027
;; CURRENT FILING DATE: 1999-09-03
;; EARLIER APPLICATION NUMBER: 60/099,291
;; EARLIER FILING DATE: 1998-09-04
;; NUMBER OF SEQ ID NOS: 12
;; SOFTWARE: Patentin Ver. 2.1
;; SEQ ID NO: 6
;; LENGTH: 59
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-390-027-6

Query Match 100.0%; Score 48; DB 2; Length 59;
Best Local Similarity 100.0%; Pred. No. 0.019;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 YMLDQPT 9
Db 14 YMLDQPT 22

RESULT 25
US-08-406-248-6
;; Sequence 6, Application US/08406248
;; Patent No. 5736318
;; GENERAL INFORMATION:
;; APPLICANT: Munger, Karl
;; APPLICANT: Jones, D. Leanne
;; TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
;; TITLE OF INVENTION: TRANSFORMED CELLS
;; NUMBER OF SEQUENCES: 6
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kusmer
;; STREET: 200 State Street
;; CITY: Boston
;; STATE: MA
;; COUNTRY: USA
;; ZIP: 02109
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: Patentin Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/406,248
;; FILING DATE:
;; CLASSIFICATION: 436
;; ATTORNEY/AGENT INFORMATION:
;; NAME: McDaniel's, Patricia A.
;; REGISTRATION NUMBER: 33,194
;; REFERENCE/DOCKET NUMBER: HA2-011
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 617-330-1300
;; TELEFAX: 617-330-1311
;; INFORMATION FOR SEQ ID NO: 6:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 98 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
US-08-406-248-6

Query Match 100.0%; Score 48; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 26
US-08-075-541D-42
;; Sequence 42, Application US/08075541D
;; Patent No. 6183745
;; GENERAL INFORMATION:
;; APPLICANT: TINDLE, ROBERT
;; APPLICANT: FERNANDO, GERMAIN
;; APPLICANT: FRAZER, IAN
;; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
;; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
;; NUMBER OF SEQUENCES: 56
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P. C.
;; STREET: 1601 MARKET STREET, 36TH FLOOR
;; CITY: PHILADELPHIA
;; STATE: PENNSYLVANIA
;; COUNTRY: USA
;; ZIP: 19103-2398
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: Patentin Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/075,541D
;; FILING DATE: 10-JUN-1993
;; CLASSIFICATION: 424
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: AU pk 3876
;; FILING DATE: 12-DEC-1990
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: pct/au91/00575
;; FILING DATE: 12-DEC-1991
;; ATTORNEY/AGENT INFORMATION:
;; NAME: NADEL, ALAN S
;; REGISTRATION NUMBER: 27,363
;; REFERENCE/DOCKET NUMBER: 8795-4
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 215-567-2020
;; TELEFAX: 215-567-2991
;; INFORMATION FOR SEQ ID NO: 42:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 98 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-08-075-541D-42

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 27
US-09-382-616A-1
;; Sequence 1, Application US/09382616A
;; Patent No. 6200746
;; GENERAL INFORMATION:
;; APPLICANT: Fisher, Christopher
;; APPLICANT: He, Wanxia
;; TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
;; FILE REFERENCE: 28341/6216
;; CURRENT APPLICATION NUMBER: US/09/382,616A
;; CURRENT FILING DATE: 1999-08-25
;; PRIOR APPLICATION NUMBER: 09/382,616
;; PRIOR FILING DATE: 1999-08-25
;; NUMBER OF SEQ ID NOS: 43
;; SOFTWARE: Patentin Ver. 2.0

```
/ SEQ ID NO 1
/ LENGTH: 98
/ TYPE: PRT
/ ORGANISM: Papillomavirus sylvilagi
US-09-382-616A-1

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDQPT 9
Db      11 YMLDQPT 19

RESULT 28
US-08-944-368A-4
/ Sequence 4, Application US/08944368A
/ Patent No. 6228368
/ GENERAL INFORMATION:
/ APPLICANT: Gissman, et al.
/ TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine
/ NUMBER OF SEQUENCES: 28
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
/ STREET: 233 South Wacker Drive, 6300 Sears Tower
/ CITY: Chicago
/ STATE: Illinois
/ COUNTRY: United States of America
/ ZIP: 60606-6402
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/944,368A
/ FILING DATE:
/ CLASSIFICATION: 424
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Williams Jr., Joseph A.
/ REGISTRATION NUMBER: 38,659
/ REFERENCE/DOCKET NUMBER: 27013/34028
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 312-474-6300
/ TELEFAX: 312-474-0448
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 98 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-944-368A-4

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDQPT 9
Db      11 YMLDQPT 19

RESULT 29
US-09-820-764-4
/ Sequence 4, Application US/09820764
/ Patent No. 6352696
/ GENERAL INFORMATION:
/ APPLICANT: BURGER, Alexander
/ HALLER, Michael
/ TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
```

```
FORMULATIONS AND METHODS OF USE
/ NUMBER OF SEQUENCES: 28
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: FOLEY & LARDNER
/ STREET: 3000 K Street, N.W.
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: U.S.A.
/ ZIP: 20007-5109
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/820,764
/ FILING DATE: 30-Mar-2001
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 09/026,896
/ FILING DATE: 20-FEB-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Sandercock, Colin G.
/ REGISTRATION NUMBER: 31,298
/ REFERENCE/DOCKET NUMBER: 37067/102
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 672-5399
/ TELEFAX: (202) 672-5300
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 98 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-764-4

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDQPT 9
Db      11 YMLDQPT 19

RESULT 30
US-09-613-303-8
/ Sequence 8, Application US/09613303
/ Patent No. 6495347
/ GENERAL INFORMATION:
/ APPLICANT: Siegel, Marvin
/ APPLICANT: Chu, N. Randall
/ APPLICANT: Mizzen, Lee A.
/ TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
/ FILE REFERENCE: 12071/002001
/ CURRENT APPLICATION NUMBER: US/09/613,303
/ CURRENT FILING DATE: 2000-07-10
/ PRIOR APPLICATION NUMBER: US 60/143,757
/ PRIOR FILING DATE: 1999-07-08
/ NUMBER OF SEQ ID NOS: 55
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 8
/ LENGTH: 98
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 YMLDLOPRT 9
| | | | |
Db 11 YMLDLOPRT 19

RESULT 31
US-09-566-420-19
; Sequence 19, Application US/09566420
; Patent No. 6500641
; GENERAL INFORMATION:
; APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
; TITLE OF INVENTION: IMMUNE RESPONSE
; FILE REFERENCE: TBA
; CURRENT APPLICATION NUMBER: US/09/566,420
; CURRENT FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: 60/132,752
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: 60/132,750
; PRIOR FILING DATE: 1999-05-06
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 19
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type E7
US-09-566-420-19

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPRT 9
| | | | |
Db 11 YMLDLOPRT 19

RESULT 32
US-09-986-118A-4
; Sequence 4, Application US/09986118A
; Patent No. 6562351
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
; FORMULATIONS AND METHODS OF USE
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/986,118A
; FILING DATE: 07-NO. 6562351-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/026,896
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Sandercock, Colin G.
; REGISTRATION NUMBER: 31,298
; REFERENCE/DOCKET NUMBER: 37067/102
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300

TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPRT 9
| | | | |
Db 11 YMLDLOPRT 19

RESULT 33
US-09-728-466-1
; Sequence 1, Application US/09728466
; Patent No. 6641994
; GENERAL INFORMATION:
; APPLICANT: Fisher, Christopher
; TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
; FILE REFERENCE: 28341/6216
; CURRENT APPLICATION NUMBER: US/09/728,466
; CURRENT FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: 09/382,616
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 1
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Papillomavirus sv1v1ag1
US-09-728-466-1

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPRT 9
| | | | |
Db 11 YMLDLOPRT 19

RESULT 34
US-09-824-017-4
; Sequence 4, Application US/09824017
; Patent No. 6649167
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
; FORMULATIONS AND METHODS OF USE
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/824,017

FILE REFERENCE: TBA
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 35
US-10-267-311-8
Sequence 8, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 36
US-10-201-764-19
Sequence 19, Application US/10201764
Patent No. 6716623
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE

FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/201,764
CURRENT FILING DATE: 2002-07-22
PRIOR APPLICATION NUMBER: US/09/566,420
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 37
US-09-637-746-3
Sequence 3, Application US/09637746
Patent No. 6727079
GENERAL INFORMATION:
APPLICANT: Thorgeirsson, Snorri S.
APPLICANT: Woltsch, Joseph T.
APPLICANT: Zhang, Minghuang
TITLE OF INVENTION: CDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTE.
FILE REFERENCE: 11613.29USM1
CURRENT APPLICATION NUMBER: US/09/637,746
CURRENT FILING DATE: 2000-08-11
PRIOR APPLICATION NUMBER: PCT/US99/04142
PRIOR FILING DATE: 1999-02-25
PRIOR APPLICATION NUMBER: US 60/079,567
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: US 60/075,922
PRIOR FILING DATE: 1998-02-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-637-746-3

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 38
US-09-501-097A-7
Sequence 7, Application US/09501097A
Patent No. 6734173
GENERAL INFORMATION:
APPLICANT: Tzyy-Chouu Wu
APPLICANT: Chien-Fu Hung
TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
FILE REFERENCE: 2240-169349
CURRENT APPLICATION NUMBER: US/09/501,097A
CURRENT FILING DATE: 2000-02-09

```

; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 7
; LENGTH: 98
; TYPE: PRT
; ORGANISM: human papillomavirus
US-09-501-097A-7
```

```

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 YMLDQPERT 9
Db 11 YMLDQPERT 19
```

```

RESULT 39
US-09-980-523A-12
; Sequence 12, Application US/09980523A
; Patent No. 6783763
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANINNE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7
; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: MOBI AO INS
; CURRENT APPLICATION NUMBER: US/09/980,523A
; PRIOR FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: PCT/FR00/01513
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: FR 99/07012
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 12
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-09-980-523A-12
```

```

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 YMLDQPERT 9
Db 11 YMLDQPERT 19
```

```

RESULT 40
US-09-613-303-12
; Sequence 12, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: MIZZEN, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: PRT
```

```

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-12
```

```

Query Match          100.0%; Score 48; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.042;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 YMLDQPERT 9
Db 34 YMLDQPERT 42
```

```

RESULT 41
US-10-267-311-12
; Sequence 12, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: MIZZEN, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; PRIOR FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-12
```

```

Query Match          100.0%; Score 48; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.042;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 YMLDQPERT 9
Db 34 YMLDQPERT 42
```

```

RESULT 42
US-08-860-165-12
; Sequence 12, Application US/08860165A
; Patent No. 6004557
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; PRIOR FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 12
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
```

OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-12

Query Match 100.0%; Score 48; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.062; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||
Db 109 YMLDLOPET 117

RESULT 43
US-09-359-382-12
Sequence 12, Application US/09359382
Patent No. 6306397
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: PEASER, Ian

TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PNO157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 172
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-359-382-12

Query Match 100.0%; Score 48; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.062; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||
Db 109 YMLDLOPET 117

RESULT 44
US-09-462-993-2
Sequence 2, Application US/09462993
Patent No. 6884786
GENERAL INFORMATION:
APPLICANT: KIENY, Marie-Paule
APPLICANT: BALLOU, Jean-Marc
APPLICANT: BIZOUBARN, Nadine

TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
FILE REFERENCE: 01753-122
CURRENT APPLICATION NUMBER: US/09/462,993
CURRENT FILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: PCT/FR98/01576
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: FR 97/09152
PRIOR FILING DATE: 1997-07-18
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.2
SEQ ID NO 2
LENGTH: 165
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derived from human papillomavirus, strain

OTHER INFORMATION: HPV-16, E7 fusion signals of the rabies
OTHER INFORMATION: glycoprotein, clone E7*TR.
US-09-462-993-2

Query Match 100.0%; Score 48; DB 2; Length 185;
Best Local Similarity 100.0%; Pred. No. 0.067; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||
Db 36 YMLDLOPET 44

RESULT 45
US-09-613-303-35
Sequence 35, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: MIZZEN, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 35
LENGTH: 198
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-35

Query Match 100.0%; Score 48; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.072; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
|||
Db 111 YMLDLOPET 119

RESULT 46
US-10-267-311-35
Sequence 35, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: MIZZEN, Lee A.

TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 35
LENGTH: 198
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-35

Query Match 100.0%; Score 48; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.072; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 0.072;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
|||||
Db 111 YMLDQPT 119

RESULT 47
US-09-485-885-1
; Sequence 1, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Bernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 220
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-1

Query Match 100.0%; Score 48; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
|||||
Db 124 YMLDQPT 132

RESULT 48
US-09-485-885-8
; Sequence 8, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Bernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 220
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-8

Query Match 100.0%; Score 48; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.081;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
|||||
Db 124 YMLDQPT 132

RESULT 49
US-09-485-885-12
; Sequence 12, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Bernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 239
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-12

Query Match 100.0%; Score 48; DB 2; Length 239;
Best Local Similarity 100.0%; Pred. No. 0.088;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
|||||
Db 143 YMLDQPT 151

RESULT 50
US-08-459-818-20
; Sequence 20, Application US/08459818
; Patent No. 5851795
; GENERAL INFORMATION:
; APPLICANT: Linsley, Peter S.
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Dangle, Nitin K.
; APPLICANT: Brady, William
; TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 1150 Santa Monica Blvd., Suite 400
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: FastSeq 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/459,818
; FILING DATE: 02-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Adriano, Sarah B.
; REGISTRATION NUMBER: 34,470
; REFERENCE/DOCKET NUMBER: 30436.35US02
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 310-445-1140

TELEFAX: 310-445-9031
 ; INFORMATION FOR SEQ ID NO: 20:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS:
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-459-818-20

Query Match 100.0%; Score 48; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 0.094;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
 |||||
 Db 166 YMLDLOPET 174

Search completed: May 5, 2006, 02:25:09
 Job time : 26.8 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 07:44:45 ; Search time 55.9 Seconds
(without alignments)
67.271 Million cell updates/sec

Title: US-08-170-344-14

Perfect score: 48

Sequence: 1 YMLDQPT 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database : Published Applications_AA_Main:*

- 1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
- 3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
- 4: /cgn2_6/prodata/1/pubppaa/US10A_PUBCOMB.pep:*
- 5: /cgn2_6/prodata/1/pubppaa/US10B_PUBCOMB.pep:*
- 6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	48	100.0	9	3	US-09-759-960-17
2	48	100.0	9	3	US-09-891-823-3
3	48	100.0	9	3	US-09-909-460-104
4	48	100.0	9	3	US-09-872-836-104
5	48	100.0	9	4	US-10-128-711-66
6	48	100.0	9	4	US-10-365-908-3
7	48	100.0	9	5	US-10-603-062-17
8	48	100.0	9	5	US-10-871-138-3
9	48	100.0	9	5	US-10-758-970-104
10	48	100.0	9	5	US-10-751-845-58
11	48	100.0	10	3	US-09-847-185-19
12	48	100.0	10	3	US-09-835-853-22
13	48	100.0	10	3	US-09-739-466C-13
14	48	100.0	10	4	US-10-133-210-271
15	48	100.0	10	4	US-10-224-286-19
16	48	100.0	10	4	US-10-177-390-33
17	48	100.0	10	4	US-10-406-317-30
18	48	100.0	10	4	US-10-297-168-30
19	48	100.0	10	4	US-10-777-053-329
20	48	100.0	10	4	US-10-777-053-329
21	48	100.0	10	4	US-10-837-217-329
22	48	100.0	10	4	US-10-837-217-542
23	48	100.0	10	5	US-10-890-526-19
24	48	100.0	10	5	US-10-751-845-105
25	48	100.0	10	5	US-10-776-521B-366
26	48	100.0	10	5	US-10-820-067A-877
27	48	100.0	11	4	US-10-062-710-206

28	48	100.0	15	4	US-10-648-547-72	Sequence 72, App1
29	48	100.0	15	4	US-10-648-547-80	Sequence 80, App1
30	48	100.0	15	4	US-10-648-547-92	Sequence 92, App1
31	48	100.0	15	4	US-10-476-570-45	Sequence 45, App1
32	48	100.0	15	4	US-10-476-570-46	Sequence 46, App1
33	48	100.0	15	4	US-10-306-541-12	Sequence 72, App1
34	48	100.0	15	4	US-10-306-541-80	Sequence 80, App1
35	48	100.0	15	4	US-10-306-541-92	Sequence 92, App1
36	48	100.0	19	5	US-10-751-845-67	Sequence 67, App1
37	48	100.0	20	4	US-10-432-465-44	Sequence 44, App1
38	48	100.0	20	4	US-10-476-570-14	Sequence 14, App1
39	48	100.0	20	5	US-10-890-526-59	Sequence 69, App1
40	48	100.0	21	4	US-10-476-570-15	Sequence 15, App1
41	48	100.0	21	4	US-10-776-521B-378	Sequence 378, App1
42	48	100.0	23	5	US-10-858-384-14	Sequence 14, App1
43	48	100.0	23	5	US-10-858-384-3	Sequence 3, App1
44	48	100.0	30	3	US-09-828-645-3	Sequence 3, App1
45	48	100.0	30	3	US-09-828-645-7	Sequence 7, App1
46	48	100.0	30	5	US-10-827-007-3	Sequence 3, App1
47	48	100.0	30	5	US-10-827-007-7	Sequence 7, App1
48	48	100.0	30	5	US-10-827-083-3	Sequence 3, App1
49	48	100.0	30	5	US-10-827-083-7	Sequence 7, App1
50	48	100.0	31	3	US-09-739-466C-46	Sequence 46, App1
51	48	100.0	98	3	US-09-728-466-1	Sequence 1, App1
52	48	100.0	98	3	US-09-820-765-4	Sequence 4, App1
53	48	100.0	98	3	US-09-824-017-4	Sequence 4, App1
54	48	100.0	98	3	US-09-965-118A-4	Sequence 8, App1
55	48	100.0	98	4	US-10-267-311-8	Sequence 8, App1
56	48	100.0	98	4	US-10-177-390-8	Sequence 19, App1
57	48	100.0	98	4	US-10-201-764-19	Sequence 19, App1
58	48	100.0	98	4	US-10-393-113-29	Sequence 29, App1
59	48	100.0	98	4	US-10-654-129-4	Sequence 4, App1
60	48	100.0	98	4	US-10-681-410-19	Sequence 19, App1
61	48	100.0	98	4	US-10-772-988-3	Sequence 3, App1
62	48	100.0	98	4	US-10-479-541-5	Sequence 5, App1
63	48	100.0	98	5	US-10-042-526A-4	Sequence 4, App1
64	48	100.0	98	5	US-10-657-399-1	Sequence 1, App1
65	48	100.0	98	5	US-10-858-384-12	Sequence 12, App1
66	48	100.0	98	5	US-10-484-063-26	Sequence 26, App1
67	48	100.0	98	5	US-10-343-448-5	Sequence 5, App1
68	48	100.0	98	5	US-10-679-956-8	Sequence 8, App1
69	48	100.0	98	5	US-11-077-939-5	Sequence 17, App1
70	48	100.0	98	6	US-11-077-939-7	Sequence 7, App1
71	48	100.0	99	4	US-10-115-440-7	Sequence 4, App1
72	48	100.0	111	4	US-10-472-724-4	Sequence 126, App1
73	48	100.0	111	5	US-10-751-845-126	Sequence 12, App1
74	48	100.0	121	4	US-10-267-311-12	Sequence 12, App1
75	48	100.0	121	5	US-10-679-956-12	Sequence 2, App1
76	48	100.0	185	6	US-11-072-288-2	Sequence 2, App1
77	48	100.0	198	4	US-10-267-311-35	Sequence 35, App1
78	48	100.0	198	5	US-10-679-956-35	Sequence 35, App1
79	48	100.0	220	4	US-10-000-903-1	Sequence 1, App1
80	48	100.0	220	4	US-10-000-903-8	Sequence 8, App1
81	48	100.0	220	5	US-10-899-771-1	Sequence 1, App1
82	48	100.0	220	5	US-10-899-771-8	Sequence 8, App1
83	48	100.0	236	5	US-10-751-845-157	Sequence 157, App1
84	48	100.0	237	5	US-10-751-845-158	Sequence 158, App1
85	48	100.0	239	4	US-10-000-903-12	Sequence 12, App1
86	48	100.0	239	5	US-10-899-771-12	Sequence 12, App1
87	48	100.0	261	3	US-09-367-309A-1	Sequence 160, App1
88	48	100.0	261	3	US-10-115-440-5	Sequence 5, App1
89	48	100.0	289	4	US-10-267-311-33	Sequence 33, App1
90	48	100.0	295	4	US-10-679-956-33	Sequence 33, App1
91	48	100.0	324	5	US-10-267-311-25	Sequence 25, App1
92	48	100.0	324	5	US-10-679-956-25	Sequence 25, App1
93	48	100.0	334	4	US-10-472-724-10	Sequence 10, App1
94	48	100.0	371	4	US-10-000-903-6	Sequence 6, App1
95	48	100.0	371	5	US-10-899-771-6	Sequence 6, App1
96	48	100.0	390	4	US-10-000-903-14	Sequence 14, App1
97	48	100.0	390	5	US-10-899-771-14	Sequence 14, App1
98	48	100.0	421	4	US-10-296-770-7	Sequence 7, App1
99	48	100.0	493	4	US-10-267-311-19	Sequence 19, App1
100	48	100.0				

101	48	100.0	493	5	US-10-679-956-19	Sequence 19, Appl	174	33	68.8	333	4	US-10-282-122A-58387	Sequence 58387, A
102	48	100.0	639	4	US-10-267-311-17	Sequence 17, Appl	175	33	68.8	336	4	US-10-282-122A-66984	Sequence 66984, A
103	48	100.0	639	4	US-10-679-956-17	Sequence 17, Appl	176	33	68.8	339	5	US-10-872-762-2	Sequence 2, Appl1
104	48	100.0	641	4	US-10-267-311-51	Sequence 51, Appl	177	33	68.8	384	4	US-10-104-047-2534	Sequence 2534, Ap
105	48	100.0	641	5	US-10-679-956-51	Sequence 51, Appl	178	33	68.8	387	4	US-10-425-115-550457	Sequence 250457,
106	48	100.0	647	4	US-10-267-311-53	Sequence 53, Appl	179	33	68.8	414	4	US-10-473-670-8	Sequence 8, Appl1
107	48	100.0	647	5	US-10-679-956-53	Sequence 53, Appl	180	33	68.8	414	4	US-10-618-941-91-98	Sequence 98, Appl1
108	48	100.0	648	4	US-10-267-311-29	Sequence 29, Appl	181	33	68.8	434	4	US-10-425-114-69145	Sequence 69145, A
109	48	100.0	648	5	US-10-679-956-29	Sequence 29, Appl	182	33	68.8	474	4	US-10-425-115-246178	Sequence 246178,
110	48	100.0	711	4	US-10-267-311-41	Sequence 41, Appl	183	33	68.8	572	4	US-10-425-114-65396	Sequence 6396, A
111	48	100.0	711	5	US-10-679-956-41	Sequence 41, Appl	184	33	68.8	552	3	US-09-909-320-170	Sequence 170, Ap
112	48	100.0	724	4	US-10-267-311-45	Sequence 45, Appl	185	33	68.8	552	3	US-09-909-088B-170	Sequence 170, Ap
113	48	100.0	724	5	US-10-679-956-45	Sequence 45, Appl	186	33	68.8	552	3	US-09-905-218A-170	Sequence 170, Ap
114	48	100.0	805	4	US-10-367-095-9	Sequence 9, Appl1	187	33	68.8	552	3	US-09-907-853-170	Sequence 170, Ap
115	48	100.0	805	4	US-10-368-046-9	Sequence 9, Appl1	188	33	68.8	552	3	US-09-907-824-170	Sequence 170, Ap
116	48	100.0	805	4	US-10-367-367-9	Sequence 9, Appl1	189	33	68.8	552	3	US-09-907-841-170	Sequence 170, Ap
117	48	100.0	805	5	US-10-918-337-9	Sequence 9, Appl1	190	33	68.8	552	3	US-09-904-011-170	Sequence 170, Ap
118	43	89.6	888	4	US-10-367-095-8	Sequence 8, Appl1	191	33	68.8	552	3	US-09-903-640-170	Sequence 170, Ap
119	43	89.6	888	4	US-10-368-046-8	Sequence 8, Appl1	192	33	68.8	552	3	US-09-908-093-170	Sequence 170, Ap
120	43	89.6	488	4	US-10-367-367-8	Sequence 8, Appl1	193	33	68.8	552	3	US-09-906-742-170	Sequence 170, Ap
121	43	89.6	488	5	US-10-918-337-8	Sequence 8, Appl1	194	33	68.8	552	3	US-09-906-838-170	Sequence 170, Ap
122	41	85.4	9	4	US-10-128-711-71	Sequence 71, Appl	195	33	68.8	552	3	US-09-907-613-170	Sequence 170, Ap
123	41	85.4	9	4	US-10-777-053-328	Sequence 328, Ap	196	33	68.8	552	3	US-09-907-942-170	Sequence 170, Ap
124	41	85.4	9	4	US-10-777-053-496	Sequence 496, Ap	197	33	68.8	552	3	US-09-904-859-170	Sequence 170, Ap
125	41	85.4	9	4	US-10-837-053-913	Sequence 913, Ap	198	33	68.8	552	3	US-09-909-204-170	Sequence 170, Ap
126	41	85.4	9	4	US-10-837-217-328	Sequence 328, Ap	199	33	68.8	552	3	US-09-904-820-170	Sequence 170, Ap
127	41	85.4	9	4	US-10-837-217-496	Sequence 496, Ap	200	33	68.8	552	3	US-09-904-786-170	Sequence 170, Ap
128	41	85.4	9	4	US-10-837-217-913	Sequence 913, Ap	201	33	68.8	552	3	US-09-906-646-170	Sequence 170, Ap
129	41	85.4	9	5	US-10-484-063-12	Sequence 12, Appl	202	33	68.8	552	3	US-09-906-700-170	Sequence 170, Ap
130	41	85.4	9	5	US-10-751-845-101	Sequence 101, Appl	203	33	68.8	552	3	US-09-903-786-170	Sequence 170, Ap
131	41	85.4	9	5	US-10-924-377-7	Sequence 7, Appl1	204	33	68.8	552	3	US-09-902-993-170	Sequence 170, Ap
132	41	85.4	20	4	US-10-432-465-45	Sequence 45, Appl	205	33	68.8	552	3	US-09-903-749A-170	Sequence 170, Ap
133	41	85.4	20	5	US-10-890-526-70	Sequence 70, Appl	206	33	68.8	552	3	US-09-904-119-170	Sequence 170, Ap
134	40	83.3	321	4	US-10-425-115-224979	Sequence 224979,	207	33	68.8	552	3	US-09-904-956-170	Sequence 170, Ap
135	40	83.3	356	4	US-10-357-521-5	Sequence 5, Appl1	208	33	68.8	552	3	US-09-902-736-170	Sequence 170, Ap
136	40	83.3	511	4	US-10-369-493-19512	Sequence 19512, A	209	33	68.8	552	3	US-09-907-943-170	Sequence 170, Ap
137	39	81.2	576	3	US-09-364-847-37	Sequence 37, Appl	210	33	68.8	552	3	US-09-903-794-170	Sequence 170, Ap
138	39	81.2	712	3	US-09-364-847-49	Sequence 49, Appl	211	33	68.8	552	3	US-09-904-462-170	Sequence 170, Ap
139	39	81.2	712	3	US-09-364-847-51	Sequence 51, Appl	212	33	68.8	552	3	US-09-907-925-170	Sequence 170, Ap
140	38	79.2	9	5	US-10-924-377-6	Sequence 6, Appl1	213	33	68.8	552	3	US-09-907-632-170	Sequence 170, Ap
141	36	75.0	10	4	US-10-062-710-228	Sequence 228, Ap	214	33	68.8	552	3	US-09-903-520-170	Sequence 170, Ap
142	36	75.0	15	4	US-10-476-570-47	Sequence 47, Appl	215	33	68.8	552	3	US-09-905-056-170	Sequence 170, Ap
143	36	75.0	498	4	US-10-369-493-6415	Sequence 6415, Ap	216	33	68.8	552	3	US-09-909-064-170	Sequence 170, Ap
144	35	72.9	67	4	US-10-450-599-241161	Sequence 241161,	217	33	68.8	552	3	US-09-904-553-170	Sequence 170, Ap
145	34	70.8	148	5	US-10-450-763-42326	Sequence 42326, A	218	33	68.8	552	3	US-09-905-381-170	Sequence 170, Ap
146	34	70.8	200	3	US-09-972-137-3	Sequence 3, Appl1	219	33	68.8	552	3	US-09-904-465-170	Sequence 170, Ap
147	34	70.8	200	5	US-10-934-774-3	Sequence 3, Appl1	220	33	68.8	552	3	US-09-905-348-170	Sequence 170, Ap
148	34	70.8	287	4	US-10-128-714-3286	Sequence 3286, Ap	221	33	68.8	552	3	US-09-905-088-170	Sequence 170, Ap
149	34	70.8	324	4	US-10-389-566-1034	Sequence 1034, Ap	222	33	68.8	552	3	US-09-907-575-170	Sequence 170, Ap
150	34	70.8	324	5	US-10-732-923-17878	Sequence 17878, A	223	33	68.8	552	3	US-09-905-759-170	Sequence 170, Ap
151	34	70.8	580	4	US-10-282-122A-54429	Sequence 54429, A	224	33	68.8	552	3	US-09-905-785-170	Sequence 170, Ap
152	34	70.8	594	4	US-10-087-192-87	Sequence 87, Appl	225	33	68.8	552	3	US-09-902-634-170	Sequence 170, Ap
153	34	70.8	646	5	US-10-732-923-2555	Sequence 2555, Ap	226	33	68.8	552	3	US-09-902-713-170	Sequence 170, Ap
154	34	70.8	698	5	US-10-732-923-2553	Sequence 2553, Ap	227	33	68.8	552	3	US-09-907-979-170	Sequence 170, Ap
155	34	70.8	698	5	US-10-732-923-2554	Sequence 2554, Ap	228	33	68.8	552	3	US-09-902-615-170	Sequence 170, Ap
156	34	70.8	906	5	US-10-473-127-412	Sequence 412, App	229	33	68.8	552	3	US-09-903-925-170	Sequence 170, Ap
157	34	70.8	906	5	US-10-473-127-416	Sequence 416, App	230	33	68.8	552	3	US-09-906-760A-170	Sequence 170, Ap
158	34	70.8	906	5	US-10-473-127-418	Sequence 418, App	231	33	68.8	552	3	US-09-903-823-170	Sequence 170, Ap
159	34	70.8	906	5	US-10-473-127-420	Sequence 420, App	232	33	68.8	552	3	US-09-907-652-170	Sequence 170, Ap
160	34	70.8	906	5	US-10-473-127-421	Sequence 421, App	233	33	68.8	552	3	US-09-902-572A-170	Sequence 170, Ap
161	34	70.8	906	5	US-10-485-225-24	Sequence 24, Appl	234	33	68.8	552	3	US-09-902-979-170	Sequence 170, Ap
162	34	70.8	905	5	US-10-756-149-5090	Sequence 5090, Ap	235	33	68.8	552	3	US-09-905-815-170	Sequence 170, Ap
163	34	70.8	953	5	US-10-473-127-417	Sequence 417, App	236	33	68.8	552	3	US-09-906-815A-170	Sequence 170, Ap
164	34	70.8	976	6	US-11-097-143-23286	Sequence 23286, A	237	33	68.8	552	3	US-09-905-419-170	Sequence 170, Ap
165	34	70.8	1008	4	US-10-017-828-7	Sequence 7, Appl1	238	33	68.8	552	3	US-09-903-806-170	Sequence 170, Ap
166	34	70.8	1008	4	US-10-017-828-8	Sequence 8, Appl1	239	33	68.8	552	3	US-09-904-992-170	Sequence 170, Ap
167	34	70.8	1039	5	US-10-482-029-18	Sequence 18, Appl	240	33	68.8	552	3	US-09-904-838-170	Sequence 170, Ap
168	34	70.8	1039	6	US-11-021-715-153	Sequence 153, App	241	33	68.8	552	3	US-09-906-777-170	Sequence 170, Ap
169	34	70.8	1096	6	US-10-156-761-7956	Sequence 7956, Ap	242	33	68.8	552	3	US-09-903-603A-170	Sequence 170, Ap
170	34	70.8	1671	4	US-10-437-963-186669	Sequence 186669,	243	33	68.8	552	3	US-09-904-532-170	Sequence 170, Ap
171	33	68.8	257	5	US-10-732-923-2513	Sequence 2513, Ap	244	33	68.8	552	3	US-09-904-766-170	Sequence 170, Ap
172	33	68.8	324	4	US-10-425-114-60557	Sequence 60557, A	245	33	68.8	552	3	US-09-904-920A-170	Sequence 170, Ap
173	33	68.8	333	3	US-09-815-242-11170	Sequence 11170, A	246	33	68.8	552	3	US-09-904-877A-170	Sequence 170, Ap

247	33	68.8	552	3	US-09-903-562-170	Sequence 170, App	320	33	68.8	552	4	US-10-152-395-332	Sequence 332, App
248	33	68.8	552	3	US-09-906-618-170	Sequence 170, App	321	33	68.8	552	4	US-10-125-926A-332	Sequence 332, App
249	33	68.8	552	3	US-09-907-728-170	Sequence 170, App	322	33	68.8	552	4	US-10-101-125-930A-332	Sequence 332, App
250	33	68.8	552	3	US-09-904-805-170	Sequence 170, App	323	33	68.8	552	4	US-10-127-831A-332	Sequence 332, App
251	33	68.8	552	3	US-09-904-938A-170	Sequence 170, App	324	33	68.8	552	4	US-10-127-837A-332	Sequence 332, App
252	33	68.8	552	3	US-09-906-722A-170	Sequence 170, App	325	33	68.8	552	4	US-10-127-842A-332	Sequence 332, App
253	33	68.8	552	3	US-09-908-576-170	Sequence 332, App	326	33	68.8	552	4	US-10-127-843A-332	Sequence 332, App
254	33	68.8	552	3	US-10-028-072-332	Sequence 332, App	327	33	68.8	552	4	US-10-127-845A-332	Sequence 332, App
255	33	68.8	552	4	US-10-140-808-332	Sequence 332, App	328	33	68.8	552	4	US-10-127-846A-332	Sequence 332, App
256	33	68.8	552	4	US-10-121-049-332	Sequence 332, App	329	33	68.8	552	4	US-10-127-849A-332	Sequence 332, App
257	33	68.8	552	4	US-10-123-904-332	Sequence 332, App	330	33	68.8	552	4	US-10-127-850A-332	Sequence 332, App
258	33	68.8	552	4	US-10-140-470-332	Sequence 332, App	331	33	68.8	552	4	US-10-127-851A-332	Sequence 332, App
259	33	68.8	552	4	US-10-175-746-332	Sequence 332, App	332	33	68.8	552	4	US-10-128-684A-332	Sequence 332, App
260	33	68.8	552	4	US-10-176-918-332	Sequence 332, App	333	33	68.8	552	4	US-10-128-686A-332	Sequence 332, App
261	33	68.8	552	4	US-10-176-921-332	Sequence 332, App	334	33	68.8	552	4	US-10-128-690A-332	Sequence 332, App
262	33	68.8	552	4	US-10-137-865-332	Sequence 332, App	335	33	68.8	552	4	US-10-128-691A-332	Sequence 332, App
263	33	68.8	552	4	US-10-140-474-332	Sequence 332, App	336	33	68.8	552	4	US-10-131-819A-332	Sequence 332, App
264	33	68.8	552	4	US-10-142-451-332	Sequence 332, App	337	33	68.8	552	4	US-10-131-822A-332	Sequence 332, App
265	33	68.8	552	4	US-10-143-414-332	Sequence 332, App	338	33	68.8	552	4	US-10-131-835A-332	Sequence 332, App
266	33	68.8	552	4	US-10-142-419-332	Sequence 332, App	339	33	68.8	552	4	US-10-147-508-332	Sequence 332, App
267	33	68.8	552	4	US-10-142-423-332	Sequence 332, App	340	33	68.8	552	4	US-10-146-729-332	Sequence 332, App
268	33	68.8	552	4	US-10-142-423-332	Sequence 332, App	341	33	68.8	552	4	US-10-147-484-332	Sequence 332, App
269	33	68.8	552	4	US-10-121-050-332	Sequence 332, App	342	33	68.8	552	4	US-10-147-508-332	Sequence 332, App
270	33	68.8	552	4	US-10-141-755-332	Sequence 332, App	343	33	68.8	552	4	US-10-147-512-332	Sequence 332, App
271	33	68.8	552	4	US-10-143-032-332	Sequence 332, App	344	33	68.8	552	4	US-10-147-513-332	Sequence 332, App
272	33	68.8	552	4	US-10-123-108-332	Sequence 332, App	345	33	68.8	552	4	US-10-175-735-332	Sequence 332, App
273	33	68.8	552	4	US-10-123-236-332	Sequence 332, App	346	33	68.8	552	4	US-10-121-040-332	Sequence 332, App
274	33	68.8	552	4	US-10-123-261-332	Sequence 332, App	347	33	68.8	552	4	US-10-121-056-332	Sequence 332, App
275	33	68.8	552	4	US-10-140-921-332	Sequence 332, App	348	33	68.8	552	4	US-10-121-061-332	Sequence 332, App
276	33	68.8	552	4	US-10-140-928-332	Sequence 332, App	349	33	68.8	552	4	US-10-123-235-332	Sequence 332, App
277	33	68.8	552	4	US-10-121-045-332	Sequence 332, App	350	33	68.8	552	4	US-10-124-818-332	Sequence 332, App
278	33	68.8	552	4	US-10-123-292-332	Sequence 332, App	351	33	68.8	552	4	US-10-137-868-332	Sequence 332, App
279	33	68.8	552	4	US-10-123-903-332	Sequence 332, App	352	33	68.8	552	4	US-10-147-492-332	Sequence 332, App
280	33	68.8	552	4	US-10-124-819-332	Sequence 332, App	353	33	68.8	552	4	US-10-158-782-332	Sequence 332, App
281	33	68.8	552	4	US-10-124-822-332	Sequence 332, App	354	33	68.8	552	4	US-10-123-905-332	Sequence 332, App
282	33	68.8	552	4	US-10-140-925-332	Sequence 332, App	355	33	68.8	552	4	US-10-127-824A-332	Sequence 332, App
283	33	68.8	552	4	US-10-140-925-332	Sequence 332, App	356	33	68.8	552	4	US-10-127-826A-332	Sequence 332, App
284	33	68.8	552	4	US-10-160-498-332	Sequence 332, App	357	33	68.8	552	4	US-10-127-827A-332	Sequence 332, App
285	33	68.8	552	4	US-10-124-824-332	Sequence 332, App	358	33	68.8	552	4	US-10-127-830A-332	Sequence 332, App
286	33	68.8	552	4	US-10-127-825A-332	Sequence 332, App	359	33	68.8	552	4	US-10-127-832A-332	Sequence 332, App
287	33	68.8	552	4	US-10-127-835A-332	Sequence 332, App	360	33	68.8	552	4	US-10-125-921A-332	Sequence 332, App
288	33	68.8	552	4	US-10-127-839A-332	Sequence 332, App	361	33	68.8	552	4	US-10-127-821A-332	Sequence 332, App
289	33	68.8	552	4	US-10-127-901A-332	Sequence 332, App	362	33	68.8	552	4	US-10-127-828A-332	Sequence 332, App
290	33	68.8	552	4	US-10-128-693A-332	Sequence 332, App	363	33	68.8	552	4	US-10-127-828A-332	Sequence 332, App
291	33	68.8	552	4	US-10-131-813A-332	Sequence 332, App	364	33	68.8	552	4	US-10-127-827A-332	Sequence 332, App
292	33	68.8	552	4	US-10-131-818A-332	Sequence 332, App	365	33	68.8	552	4	US-10-127-830A-332	Sequence 332, App
293	33	68.8	552	4	US-10-131-822A-332	Sequence 332, App	366	33	68.8	552	4	US-10-127-832A-332	Sequence 332, App
294	33	68.8	552	4	US-10-131-824A-332	Sequence 332, App	367	33	68.8	552	4	US-10-127-833A-332	Sequence 332, App
295	33	68.8	552	4	US-10-131-830A-332	Sequence 332, App	368	33	68.8	552	4	US-10-127-834A-332	Sequence 332, App
296	33	68.8	552	4	US-10-131-837A-332	Sequence 332, App	369	33	68.8	552	4	US-10-127-841A-332	Sequence 332, App
297	33	68.8	552	4	US-10-137-872A-332	Sequence 332, App	370	33	68.8	552	4	US-10-127-844A-332	Sequence 332, App
298	33	68.8	552	4	US-10-147-500-332	Sequence 332, App	371	33	68.8	552	4	US-10-127-848A-332	Sequence 332, App
299	33	68.8	552	4	US-10-147-502-332	Sequence 332, App	372	33	68.8	552	4	US-10-127-853A-332	Sequence 332, App
300	33	68.8	552	4	US-10-147-515-332	Sequence 332, App	373	33	68.8	552	4	US-10-131-815A-332	Sequence 332, App
301	33	68.8	552	4	US-10-147-517-332	Sequence 332, App	374	33	68.8	552	4	US-10-131-822A-332	Sequence 332, App
302	33	68.8	552	4	US-10-147-526-332	Sequence 332, App	375	33	68.8	552	4	US-10-131-828A-332	Sequence 332, App
303	33	68.8	552	4	US-10-147-527-332	Sequence 332, App	376	33	68.8	552	4	US-10-131-828A-332	Sequence 332, App
304	33	68.8	552	4	US-10-147-527-332	Sequence 332, App	377	33	68.8	552	4	US-10-131-828A-332	Sequence 332, App
305	33	68.8	552	4	US-10-121-043-332	Sequence 332, App	378	33	68.8	552	4	US-10-131-815A-332	Sequence 332, App
306	33	68.8	552	4	US-10-121-043-332	Sequence 332, App	379	33	68.8	552	4	US-10-131-815A-332	Sequence 332, App
307	33	68.8	552	4	US-10-121-047-332	Sequence 332, App	380	33	68.8	552	4	US-10-131-815A-332	Sequence 332, App
308	33	68.8	552	4	US-10-125-923-332	Sequence 332, App	381	33	68.8	552	4	US-10-131-822A-332	Sequence 332, App
309	33	68.8	552	4	US-10-125-923-332	Sequence 332, App	382	33	68.8	552	4	US-10-131-822A-332	Sequence 332, App
310	33	68.8	552	4	US-10-123-908-332	Sequence 332, App	383	33	68.8	552	4	US-10-131-828A-332	Sequence 332, App
311	33	68.8	552	4	US-10-123-909-332	Sequence 332, App	384	33	68.8	552	4	US-10-137-869A-332	Sequence 332, App
312	33	68.8	552	4	US-10-123-910-332	Sequence 332, App	385	33	68.8	552	4	US-10-137-869A-332	Sequence 332, App
313	33	68.8	552	4	US-10-124-813-332	Sequence 332, App	386	33	68.8	552	4	US-10-147-523-332	Sequence 332, App
314	33	68.8	552	4	US-10-124-817-332	Sequence 332, App	387	33	68.8	552	4	US-10-147-523-332	Sequence 332, App
315	33	68.8	552	4	US-10-125-923-332	Sequence 332, App	388	33	68.8	552	4	US-10-158-785-332	Sequence 332, App
316	33	68.8	552	4	US-10-125-924-332	Sequence 332, App	389	33	68.8	552	4	US-10-121-051-332	Sequence 332, App
317	33	68.8	552	4	US-10-140-860-332	Sequence 332, App	390	33	68.8	552	4	US-10-121-042-332	Sequence 332, App
318	33	68.8	552	4	US-10-142-417-332	Sequence 332, App	391	33	68.8	552	4	US-10-123-912-332	Sequence 332, App
319	33	68.8	552	4	US-10-147-519-332	Sequence 332, App	392	33	68.8	552	4	US-10-123-912-332	Sequence 332, App
					US-10-157-782-332	Sequence 332, App							

333	33	68.8	552	4	US-10-124-359-332	Sequence 332, App	466	33	68.8	552	4	US-10-143-034-332	Sequence 332, App
334	33	68.8	552	4	US-10-127-847A-332	Sequence 332, App	467	33	68.8	552	4	US-10-143-116-332	Sequence 332, App
335	33	68.8	552	4	US-10-137-866-332	Sequence 332, App	468	33	68.8	552	4	US-10-144-957-332	Sequence 332, App
336	33	68.8	552	4	US-10-146-726-332	Sequence 332, App	469	33	68.8	552	4	US-10-144-992-332	Sequence 332, App
337	33	68.8	552	4	US-10-146-727-332	Sequence 332, App	470	33	68.8	552	4	US-10-145-015-332	Sequence 332, App
338	33	68.8	552	4	US-10-146-788-332	Sequence 332, App	471	33	68.8	552	4	US-10-145-090-332	Sequence 332, App
339	33	68.8	552	4	US-10-152-380-332	Sequence 332, App	472	33	68.8	552	4	US-10-145-091-332	Sequence 332, App
400	33	68.8	552	4	US-10-153-934-332	Sequence 332, App	473	33	68.8	552	4	US-10-145-029-332	Sequence 332, App
401	33	68.8	552	4	US-10-140-807-332	Sequence 332, App	474	33	68.8	552	4	US-10-145-630-332	Sequence 332, App
402	33	68.8	552	4	US-10-140-924-332	Sequence 332, App	475	33	68.8	552	4	US-10-145-747-332	Sequence 332, App
403	33	68.8	552	4	US-10-140-926-332	Sequence 332, App	476	33	68.8	552	4	US-10-145-752-332	Sequence 332, App
404	33	68.8	552	4	US-10-141-698-332	Sequence 332, App	477	33	68.8	552	4	US-10-145-754-332	Sequence 332, App
405	33	68.8	552	4	US-10-141-702-332	Sequence 332, App	478	33	68.8	552	4	US-10-145-755-332	Sequence 332, App
406	33	68.8	552	4	US-10-141-704-332	Sequence 332, App	479	33	68.8	552	4	US-10-145-818-332	Sequence 332, App
407	33	68.8	552	4	US-10-142-421-332	Sequence 332, App	480	33	68.8	552	4	US-10-145-820-332	Sequence 332, App
408	33	68.8	552	4	US-10-142-432-332	Sequence 332, App	481	33	68.8	552	4	US-10-145-872-332	Sequence 332, App
409	33	68.8	552	4	US-10-142-767-332	Sequence 332, App	482	33	68.8	552	4	US-10-145-873-332	Sequence 332, App
410	33	68.8	552	4	US-10-143-033-332	Sequence 332, App	483	33	68.8	552	4	US-10-147-681-332	Sequence 332, App
411	33	68.8	552	4	US-10-144-994-332	Sequence 332, App	484	33	68.8	552	4	US-10-147-482-332	Sequence 332, App
412	33	68.8	552	4	US-10-145-628-332	Sequence 332, App	485	33	68.8	552	4	US-10-147-503-332	Sequence 332, App
413	33	68.8	552	4	US-10-145-746-332	Sequence 332, App	486	33	68.8	552	4	US-10-147-522-332	Sequence 332, App
414	33	68.8	552	4	US-10-145-748-332	Sequence 332, App	487	33	68.8	552	4	US-10-152-401-332	Sequence 332, App
415	33	68.8	552	4	US-10-145-823-332	Sequence 332, App	488	33	68.8	552	4	US-10-157-783-332	Sequence 332, App
416	33	68.8	552	4	US-10-145-826-332	Sequence 332, App	489	33	68.8	552	4	US-10-158-792-332	Sequence 332, App
417	33	68.8	552	4	US-10-145-870-332	Sequence 332, App	490	33	68.8	552	4	US-10-158-462-332	Sequence 332, App
418	33	68.8	552	4	US-10-145-876-332	Sequence 332, App	491	33	68.8	552	4	US-10-143-035-332	Sequence 332, App
419	33	68.8	552	4	US-10-145-959-332	Sequence 332, App	492	33	68.8	552	4	US-10-145-751-332	Sequence 332, App
420	33	68.8	552	4	US-10-146-724-332	Sequence 332, App	493	33	68.8	552	4	US-10-145-822-332	Sequence 332, App
421	33	68.8	552	4	US-10-146-725-332	Sequence 332, App	494	33	68.8	552	4	US-10-145-824-332	Sequence 332, App
422	33	68.8	552	4	US-10-146-795-332	Sequence 332, App	495	33	68.8	552	4	US-10-145-827-332	Sequence 332, App
423	33	68.8	552	4	US-10-147-495-332	Sequence 332, App	496	33	68.8	552	4	US-10-145-869-332	Sequence 332, App
424	33	68.8	552	4	US-10-147-501-332	Sequence 332, App	497	33	68.8	552	4	US-10-145-875-332	Sequence 332, App
425	33	68.8	552	4	US-10-147-504-332	Sequence 332, App	498	33	68.8	552	4	US-10-145-877-332	Sequence 332, App
426	33	68.8	552	4	US-10-147-506-332	Sequence 332, App	499	33	68.8	552	4	US-10-145-958-332	Sequence 332, App
427	33	68.8	552	4	US-10-147-509-332	Sequence 332, App	500	33	68.8	552	4	US-10-146-787-332	Sequence 332, App
428	33	68.8	552	4	US-10-147-510-332	Sequence 332, App	501	33	68.8	552	4	US-10-146-790-332	Sequence 332, App
429	33	68.8	552	4	US-10-147-511-332	Sequence 332, App	502	33	68.8	552	4	US-10-146-793-332	Sequence 332, App
430	33	68.8	552	4	US-10-147-529-332	Sequence 332, App	503	33	68.8	552	4	US-10-147-480-332	Sequence 332, App
431	33	68.8	552	4	US-10-152-397-332	Sequence 332, App	504	33	68.8	552	4	US-10-147-485-332	Sequence 332, App
432	33	68.8	552	4	US-10-153-586-332	Sequence 332, App	505	33	68.8	552	4	US-10-147-486-332	Sequence 332, App
433	33	68.8	552	4	US-10-158-786-332	Sequence 332, App	506	33	68.8	552	4	US-10-147-487-332	Sequence 332, App
434	33	68.8	552	4	US-10-137-870-332	Sequence 332, App	507	33	68.8	552	4	US-10-147-490-332	Sequence 332, App
435	33	68.8	552	4	US-10-140-018-332	Sequence 332, App	508	33	68.8	552	4	US-10-147-494-332	Sequence 332, App
436	33	68.8	552	4	US-10-140-021-332	Sequence 332, App	509	33	68.8	552	4	US-10-147-498-332	Sequence 332, App
437	33	68.8	552	4	US-10-140-471-332	Sequence 332, App	510	33	68.8	552	4	US-10-147-514-332	Sequence 332, App
438	33	68.8	552	4	US-10-140-922-332	Sequence 332, App	511	33	68.8	552	4	US-10-147-524-332	Sequence 332, App
439	33	68.8	552	4	US-10-145-631-332	Sequence 332, App	512	33	68.8	552	4	US-10-152-379-332	Sequence 332, App
440	33	68.8	552	4	US-10-145-633-332	Sequence 332, App	513	33	68.8	552	4	US-10-152-394-332	Sequence 332, App
441	33	68.8	552	4	US-10-158-783-332	Sequence 332, App	514	33	68.8	552	4	US-10-152-406-332	Sequence 332, App
442	33	68.8	552	4	US-10-140-274-332	Sequence 332, App	515	33	68.8	552	4	US-10-156-847-332	Sequence 332, App
443	33	68.8	552	4	US-10-140-019-332	Sequence 332, App	516	33	68.8	552	4	US-10-157-778-332	Sequence 332, App
444	33	68.8	552	4	US-10-140-022-332	Sequence 332, App	517	33	68.8	552	4	US-10-157-799-332	Sequence 332, App
445	33	68.8	552	4	US-10-140-861-332	Sequence 332, App	518	33	68.8	552	4	US-10-160-504-332	Sequence 332, App
446	33	68.8	552	4	US-10-140-862-332	Sequence 332, App	519	33	68.8	552	4	US-10-145-634-332	Sequence 332, App
447	33	68.8	552	4	US-10-141-697-332	Sequence 332, App	520	33	68.8	552	4	US-10-147-520-332	Sequence 332, App
448	33	68.8	552	4	US-10-141-700-332	Sequence 332, App	521	33	68.8	552	4	US-10-157-781-332	Sequence 332, App
449	33	68.8	552	4	US-10-141-705-332	Sequence 332, App	522	33	68.8	552	4	US-10-176-989-332	Sequence 332, App
450	33	68.8	552	4	US-10-141-753-332	Sequence 332, App	523	33	68.8	552	4	US-10-147-491-332	Sequence 332, App
451	33	68.8	552	4	US-10-141-758-332	Sequence 332, App	524	33	68.8	552	4	US-10-152-378-332	Sequence 332, App
452	33	68.8	552	4	US-10-142-418-332	Sequence 332, App	525	33	68.8	552	4	US-10-152-382-332	Sequence 332, App
453	33	68.8	552	4	US-10-142-420-332	Sequence 332, App	526	33	68.8	552	4	US-10-152-383-332	Sequence 332, App
454	33	68.8	552	4	US-10-142-422-332	Sequence 332, App	527	33	68.8	552	4	US-10-152-384-332	Sequence 332, App
455	33	68.8	552	4	US-10-142-427-332	Sequence 332, App	528	33	68.8	552	4	US-10-152-387-332	Sequence 332, App
456	33	68.8	552	4	US-10-142-760-332	Sequence 332, App	529	33	68.8	552	4	US-10-152-389-332	Sequence 332, App
457	33	68.8	552	4	US-10-145-821-332	Sequence 332, App	530	33	68.8	552	4	US-10-152-390-332	Sequence 332, App
458	33	68.8	552	4	US-10-152-531-332	Sequence 332, App	531	33	68.8	552	4	US-10-152-392-332	Sequence 332, App
459	33	68.8	552	4	US-10-127-840A-332	Sequence 332, App	532	33	68.8	552	4	US-10-153-756-332	Sequence 332, App
460	33	68.8	552	4	US-10-142-424-332	Sequence 332, App	533	33	68.8	552	4	US-10-157-784-332	Sequence 332, App
461	33	68.8	552	4	US-10-142-761-332	Sequence 332, App	534	33	68.8	552	4	US-10-157-797-332	Sequence 332, App
462	33	68.8	552	4	US-10-142-763-332	Sequence 332, App	535	33	68.8	552	4	US-10-158-491-332	Sequence 332, App
463	33	68.8	552	4	US-10-142-765-332	Sequence 332, App	536	33	68.8	552	4	US-10-299-976-170	Sequence 170, App
464	33	68.8	552	4	US-10-142-887-332	Sequence 332, App	537	33	68.8	552	4	US-10-142-762-332	Sequence 332, App
465	33	68.8	552	4	US-10-142-888-332	Sequence 332, App	538	33	68.8	552	4	US-10-142-764-332	Sequence 332, App

539	33	68.8	552	4	US-10-142-766-332	Sequence 332, App	612	33	68.8	552	4	US-10-125-932-332	Sequence 332, App
540	33	68.8	552	4	US-10-145-625-332	Sequence 332, App	613	33	68.8	552	4	US-10-127-852A-332	Sequence 332, App
541	33	68.8	552	4	US-10-145-627-332	Sequence 332, App	614	33	68.8	552	4	US-10-127-900A-332	Sequence 332, App
542	33	68.8	552	4	US-10-145-960-332	Sequence 332, App	615	33	68.8	552	4	US-10-128-685A-332	Sequence 332, App
543	33	68.8	552	4	US-10-145-962-332	Sequence 332, App	616	33	68.8	552	4	US-10-131-820A-332	Sequence 332, App
544	33	68.8	552	4	US-10-146-789-332	Sequence 332, App	617	33	68.8	552	4	US-10-142-886-332	Sequence 332, App
545	33	68.8	552	4	US-10-147-483-332	Sequence 332, App	618	33	68.8	552	4	US-10-146-786-332	Sequence 332, App
546	33	68.8	552	4	US-10-147-496-332	Sequence 332, App	619	33	68.8	552	4	US-10-147-498-332	Sequence 332, App
547	33	68.8	552	4	US-10-147-505-332	Sequence 332, App	620	33	68.8	552	4	US-10-157-798-332	Sequence 332, App
548	33	68.8	552	4	US-10-147-516-332	Sequence 332, App	621	33	68.8	552	4	US-10-123-913-332	Sequence 332, App
549	33	68.8	552	4	US-10-152-398-332	Sequence 332, App	622	33	68.8	552	4	US-10-140-473-332	Sequence 332, App
550	33	68.8	552	4	US-10-139-980-332	Sequence 170, App	623	33	68.8	552	4	US-10-140-806-332	Sequence 332, App
551	33	68.8	552	4	US-10-145-750-332	Sequence 332, App	625	33	68.8	552	4	US-10-140-810-332	Sequence 332, App
552	33	68.8	552	4	US-10-152-373-332	Sequence 332, App	626	33	68.8	552	4	US-10-141-853-332	Sequence 332, App
553	33	68.8	552	4	US-10-121-054-332	Sequence 332, App	627	33	68.8	552	4	US-10-141-703-332	Sequence 332, App
554	33	68.8	552	4	US-10-121-055-332	Sequence 332, App	628	33	68.8	552	4	US-10-141-709-332	Sequence 332, App
555	33	68.8	552	4	US-10-121-057-332	Sequence 332, App	629	33	68.8	552	4	US-10-141-757-332	Sequence 332, App
556	33	68.8	552	4	US-10-121-058-332	Sequence 332, App	630	33	68.8	552	4	US-10-141-762-332	Sequence 332, App
557	33	68.8	552	4	US-10-121-059-332	Sequence 332, App	631	33	68.8	552	4	US-10-142-428-332	Sequence 332, App
558	33	68.8	552	4	US-10-121-059-332	Sequence 332, App	632	33	68.8	552	4	US-10-142-429-332	Sequence 332, App
559	33	68.8	552	4	US-10-121-060-332	Sequence 332, App	633	33	68.8	552	4	US-10-142-884-332	Sequence 332, App
560	33	68.8	552	4	US-10-123-109-332	Sequence 332, App	634	33	68.8	552	4	US-10-143-027-332	Sequence 332, App
561	33	68.8	552	4	US-10-123-154-332	Sequence 332, App	635	33	68.8	552	4	US-10-143-115-332	Sequence 332, App
562	33	68.8	552	4	US-10-123-157-332	Sequence 332, App	636	33	68.8	552	4	US-10-144-956-332	Sequence 332, App
563	33	68.8	552	4	US-10-123-906-332	Sequence 332, App	637	33	68.8	552	4	US-10-144-958-332	Sequence 332, App
564	33	68.8	552	4	US-10-124-814-332	Sequence 332, App	638	33	68.8	552	4	US-10-144-958-332	Sequence 332, App
565	33	68.8	552	4	US-10-124-816-332	Sequence 332, App	639	33	68.8	552	4	US-10-145-632-332	Sequence 332, App
566	33	68.8	552	4	US-10-124-820-332	Sequence 332, App	640	33	68.8	552	4	US-10-145-749-332	Sequence 332, App
567	33	68.8	552	4	US-10-125-704-332	Sequence 332, App	641	33	68.8	552	4	US-10-145-753-332	Sequence 332, App
568	33	68.8	552	4	US-10-125-927-332	Sequence 332, App	642	33	68.8	552	4	US-10-146-871-332	Sequence 332, App
569	33	68.8	552	4	US-10-142-889-332	Sequence 332, App	643	33	68.8	552	4	US-10-146-878-332	Sequence 332, App
570	33	68.8	552	4	US-10-145-874-332	Sequence 332, App	644	33	68.8	552	4	US-10-146-794-332	Sequence 332, App
571	33	68.8	552	4	US-10-147-497-332	Sequence 332, App	645	33	68.8	552	4	US-10-147-507-332	Sequence 332, App
572	33	68.8	552	4	US-10-152-371-332	Sequence 332, App	646	33	68.8	552	4	US-10-147-537-332	Sequence 332, App
573	33	68.8	552	4	US-10-152-374-332	Sequence 332, App	647	33	68.8	552	4	US-10-147-537-332	Sequence 332, App
574	33	68.8	552	4	US-10-152-375-332	Sequence 332, App	649	33	68.8	552	4	US-10-152-376-332	Sequence 332, App
575	33	68.8	552	4	US-10-152-377-332	Sequence 332, App	650	33	68.8	552	4	US-10-152-381-332	Sequence 332, App
576	33	68.8	552	4	US-10-152-386-332	Sequence 332, App	651	33	68.8	552	4	US-10-153-585-332	Sequence 332, App
577	33	68.8	552	4	US-10-152-391-332	Sequence 332, App	652	33	68.8	552	4	US-10-153-585-332	Sequence 332, App
578	33	68.8	552	4	US-10-152-399-332	Sequence 332, App	653	33	68.8	552	4	US-10-157-780-332	Sequence 332, App
579	33	68.8	552	4	US-10-156-848-332	Sequence 332, App	654	33	68.8	552	4	US-10-157-800-332	Sequence 332, App
580	33	68.8	552	4	US-10-157-785-332	Sequence 332, App	655	33	68.8	552	4	US-10-157-801-332	Sequence 332, App
581	33	68.8	552	4	US-10-157-794-332	Sequence 332, App	656	33	68.8	552	4	US-10-157-802-332	Sequence 332, App
582	33	68.8	552	4	US-10-157-796-332	Sequence 332, App	657	33	68.8	552	4	US-10-158-784-332	Sequence 332, App
583	33	68.8	552	4	US-10-160-500-332	Sequence 332, App	658	33	68.8	552	4	US-10-158-789-332	Sequence 332, App
584	33	68.8	552	4	US-10-121-046-332	Sequence 332, App	659	33	68.8	552	4	US-10-158-789-332	Sequence 332, App
585	33	68.8	552	4	US-10-123-156-332	Sequence 332, App	660	33	68.8	552	4	US-10-139-966-332	Sequence 332, App
586	33	68.8	552	4	US-10-123-214-332	Sequence 332, App	661	33	68.8	552	4	US-10-140-020-332	Sequence 332, App
587	33	68.8	552	4	US-10-125-805-332	Sequence 332, App	662	33	68.8	552	4	US-10-140-020-332	Sequence 332, App
588	33	68.8	552	4	US-10-124-821-332	Sequence 332, App	663	33	68.8	552	4	US-10-140-809-332	Sequence 332, App
589	33	68.8	552	4	US-10-152-385-332	Sequence 332, App	664	33	68.8	552	4	US-10-140-865-332	Sequence 332, App
590	33	68.8	552	4	US-10-152-393-332	Sequence 332, App	665	33	68.8	552	4	US-10-141-701-332	Sequence 332, App
591	33	68.8	552	4	US-10-153-966-332	Sequence 332, App	666	33	68.8	552	4	US-10-141-754-332	Sequence 332, App
592	33	68.8	552	4	US-10-153-952-332	Sequence 332, App	667	33	68.8	552	4	US-10-141-760-332	Sequence 332, App
593	33	68.8	552	4	US-10-153-840-332	Sequence 332, App	668	33	68.8	552	4	US-10-142-425-332	Sequence 332, App
594	33	68.8	552	4	US-10-156-841-332	Sequence 332, App	669	33	68.8	552	4	US-10-142-430-332	Sequence 332, App
595	33	68.8	552	4	US-10-156-842-332	Sequence 332, App	670	33	68.8	552	4	US-10-143-113-332	Sequence 332, App
596	33	68.8	552	4	US-10-156-844-332	Sequence 332, App	671	33	68.8	552	4	US-10-146-730-332	Sequence 332, App
597	33	68.8	552	4	US-10-156-845-332	Sequence 332, App	672	33	68.8	552	4	US-10-146-792-332	Sequence 332, App
598	33	68.8	552	4	US-10-156-846-332	Sequence 332, App	673	33	68.8	552	4	US-10-158-843-332	Sequence 332, App
599	33	68.8	552	4	US-10-121-048-332	Sequence 332, App	674	33	68.8	552	4	US-10-157-786-332	Sequence 332, App
600	33	68.8	552	4	US-10-121-052-332	Sequence 332, App	675	33	68.8	552	4	US-10-152-405-332	Sequence 332, App
601	33	68.8	552	4	US-10-121-053-332	Sequence 332, App	676	33	68.8	552	4	US-10-152-405-332	Sequence 332, App
602	33	68.8	552	4	US-10-121-054-332	Sequence 332, App	677	33	68.8	552	4	US-10-298-993-170	Sequence 170, App
603	33	68.8	552	4	US-10-121-053-332	Sequence 332, App	678	33	68.8	552	4	US-10-147-528-332	Sequence 332, App
604	33	68.8	552	4	US-10-123-212-332	Sequence 332, App	679	33	68.8	552	4	US-10-448-923-170	Sequence 170, App
605	33	68.8	552	4	US-10-123-213-332	Sequence 332, App	680	33	68.8	552	4	US-10-449-656-170	Sequence 170, App
606	33	68.8	552	4	US-10-123-291-332	Sequence 332, App	681	33	68.8	552	4	US-10-448-713-170	Sequence 170, App
607	33	68.8	552	4	US-10-123-322-332	Sequence 332, App	682	33	68.8	552	4	US-10-128-692A-332	Sequence 332, App
608	33	68.8	552	4	US-10-123-771-332	Sequence 332, App	683	33	68.8	552	4	US-10-140-927-332	Sequence 332, App
609	33	68.8	552	4	US-10-123-911-332	Sequence 332, App	684	33	68.8	552	4	US-10-425-447-170	Sequence 170, App
610	33	68.8	552	4	US-10-124-823-332	Sequence 332, App							
611	33	68.8	552	4	US-10-125-931-332	Sequence 332, App							

685	33	68.8	552	4	US-10-147-493-332	Sequence 332, App	758	32	66.7	530	4	US-10-425-115-264216	Sequence 264216,
686	33	68.8	552	4	US-10-145-127-332	Sequence 332, App	759	32	66.7	531	4	US-10-437-963-112039	Sequence 112039,
687	33	68.8	552	4	US-10-160-503-332	Sequence 332, App	760	32	66.7	548	4	US-10-047-542-77	Sequence 77, Appl
688	33	68.8	552	4	US-10-143-118-332	Sequence 332, App	761	32	66.7	548	4	US-10-047-542-78	Sequence 78, Appl
689	33	68.8	552	4	US-10-144-993-332	Sequence 332, App	762	32	66.7	566	4	US-10-600-070-119	Sequence 119, Appl
690	33	68.8	552	4	US-10-158-787-332	Sequence 332, App	763	32	66.7	590	5	US-10-899-557-9	Sequence 9, Appl
691	33	68.8	552	4	US-10-142-426-332	Sequence 332, App	764	32	66.7	599	4	US-10-369-493-17162	Sequence 17162, A
692	33	68.8	552	4	US-10-140-024-332	Sequence 332, App	765	32	66.7	652	5	US-10-625-972-6	Sequence 6, Appl
693	33	68.8	552	4	US-10-147-536-332	Sequence 332, App	766	32	66.7	669	3	US-09-809-665A-105	Sequence 105, App
694	33	68.8	552	4	US-10-152-372-332	Sequence 332, App	767	32	66.7	669	5	US-10-854-289-105	Sequence 105, App
695	33	68.8	552	4	US-10-215-371-170	Sequence 170, App	768	32	66.7	692	4	US-10-437-963-144927	Sequence 144927,
696	33	68.8	552	4	US-10-797-366-170	Sequence 170, App	769	32	66.7	714	4	US-10-600-070-169	Sequence 169, App
697	33	68.8	552	4	US-10-771-187-170	Sequence 170, App	770	32	66.7	714	4	US-10-600-070-170	Sequence 170, App
698	33	68.8	552	4	US-10-125-795-332	Sequence 332, App	771	32	66.7	719	4	US-10-282-122A-72669	Sequence 72669, A
699	33	68.8	552	4	US-10-145-626-332	Sequence 332, App	772	32	66.7	762	4	US-10-705-195-2	Sequence 2, Appl
700	33	68.8	552	4	US-10-145-819-332	Sequence 332, App	773	32	66.7	770	5	US-10-473-127-415	Sequence 415, Appl
701	33	68.8	552	4	US-10-145-825-332	Sequence 332, App	774	32	66.7	770	5	US-10-473-127-419	Sequence 419, App
702	33	68.8	552	4	US-10-147-513-332	Sequence 332, App	775	32	66.7	770	5	US-10-370-715B-458	Sequence 458, App
703	33	68.8	552	4	US-10-147-518-332	Sequence 332, App	776	32	66.7	776	5	US-10-631-467-861	Sequence 861, App
704	33	68.8	552	5	US-10-145-961-332	Sequence 332, App	777	32	66.7	776	4	US-10-425-115-329963	Sequence 329963,
705	33	68.8	552	5	US-10-147-488-332	Sequence 332, App	778	32	66.7	781	4	US-10-437-963-108937	Sequence 108937,
706	33	68.8	552	5	US-10-147-531-332	Sequence 332, App	779	32	66.7	810	5	US-10-473-127-414	Sequence 414, App
707	33	68.8	552	5	US-10-931-886-332	Sequence 332, App	780	32	66.7	854	4	US-10-437-963-182655	Sequence 182655,
708	33	68.8	552	5	US-10-158-788-332	Sequence 332, App	781	32	66.7	888	4	US-10-437-963-147897	Sequence 147897,
709	33	68.8	552	5	US-10-963-467-170	Sequence 170, App	782	32	66.7	888	5	US-10-473-127-413	Sequence 413, App
710	33	68.8	552	5	US-10-978-255-170	Sequence 170, App	783	32	66.7	982	5	US-10-473-127-422	Sequence 422, App
711	33	68.8	552	5	US-10-955-952-332	Sequence 332, App	784	32	66.7	982	5	US-10-934-998-78	Sequence 78, Appl
712	33	68.8	552	5	US-10-970-823-170	Sequence 170, App	785	32	66.7	982	5	US-10-485-225-4	Sequence 4, Appl
713	33	68.8	613	6	US-11-097-143-3744	Sequence 3744, Ap	786	32	66.7	1259	4	US-10-282-122A-75300	Sequence 75300, A
714	33	68.8	613	6	US-11-097-143-28713	Sequence 28713, A	787	32	66.7	1259	4	US-10-282-122A-76150	Sequence 76150, A
715	33	68.8	618	4	US-10-369-493-19262	Sequence 19262, A	788	32	66.7	1398	4	US-10-369-493-5014	Sequence 5014, Ap
716	33	68.8	673	4	US-10-176-305-2	Sequence 2, Appl	789	32	66.7	1907	3	US-09-832-292-39	Sequence 39, Appl
717	33	68.8	673	5	US-10-968-812-2	Sequence 2, Appl	790	31	64.6	9	5	US-10-924-377-5	Sequence 5, Appl
718	33	68.8	935	4	US-10-408-765A-33	Sequence 33, Appl	791	31	64.6	15	4	US-10-648-547-69	Sequence 69, Appl
719	33	68.8	935	4	US-10-741-601-561	Sequence 561, App	792	31	64.6	15	4	US-10-306-541-69	Sequence 69, Appl
720	33	68.8	935	4	US-10-741-601-562	Sequence 562, App	793	31	64.6	23	4	US-10-346-162-61	Sequence 61, Appl
721	33	68.8	935	5	US-10-741-600-1645	Sequence 1645, Ap	794	31	64.6	23	4	US-10-346-162-73	Sequence 73, Appl
722	33	68.8	935	5	US-10-741-600-1646	Sequence 1646, Ap	795	31	64.6	60	4	US-10-425-115-239667	Sequence 239667
723	33	68.8	1895	5	US-10-696-909A-58	Sequence 58, Appl	796	31	64.6	68	4	US-10-425-115-251667	Sequence 251667,
724	33	68.8	1963	5	US-09-964-956-43	Sequence 43, Appl	797	31	64.6	74	4	US-10-424-599-150806	Sequence 150806,
725	32	66.7	9	5	US-10-484-063-13	Sequence 13, Appl	798	31	64.6	78	3	US-09-864-761-66318	Sequence 66318, A
726	32	66.7	9	5	US-10-751-845-103	Sequence 103, Appl	799	31	64.6	79	4	US-10-424-599-188239	Sequence 188239,
727	32	66.7	10	5	US-10-751-845-99	Sequence 99, Appl	800	31	64.6	79	4	US-10-425-114-68956	Sequence 68956, A
728	32	66.7	82	4	US-10-437-963-136704	Sequence 136704,	801	31	64.6	112	4	US-10-437-963-108929	Sequence 108929,
729	32	66.7	94	4	US-10-424-599-173252	Sequence 173252,	802	31	64.6	129	4	US-10-029-386-29544	Sequence 29544, A
730	32	66.7	94	4	US-10-767-701-40710	Sequence 40710, A	803	31	64.6	129	4	US-10-425-115-359483	Sequence 359483
731	32	66.7	135	4	US-10-425-115-215471	Sequence 215471,	804	31	64.6	136	4	US-10-425-115-338255	Sequence 338255,
732	32	66.7	149	4	US-10-767-701-52446	Sequence 52446, A	805	31	64.6	150	4	US-10-425-115-191861	Sequence 191861,
733	32	66.7	161	4	US-10-425-115-318912	Sequence 318912,	806	31	64.6	161	4	US-10-767-701-12385	Sequence 12385, A
734	32	66.7	166	4	US-10-425-115-342231	Sequence 342231,	807	31	64.6	167	4	US-10-425-114-68345	Sequence 68345, A
735	32	66.7	172	5	US-10-450-763-30667	Sequence 30667, A	808	31	64.6	172	4	US-10-029-386-32917	Sequence 32917, A
736	32	66.7	191	4	US-10-114-270-104	Sequence 104, App	809	31	64.6	173	4	US-10-017-161-1196	Sequence 1196, Ap
737	32	66.7	208	4	US-10-369-493-11518	Sequence 11518, A	810	31	64.6	181	4	US-10-437-963-131653	Sequence 131653,
738	32	66.7	211	4	US-10-369-493-14421	Sequence 14421, A	811	31	64.6	189	4	US-10-425-115-295079	Sequence 295079,
739	32	66.7	211	4	US-10-369-493-14840	Sequence 14840, A	812	31	64.6	193	4	US-10-425-115-191872	Sequence 191872,
740	32	66.7	211	4	US-10-369-493-15025	Sequence 15025, A	813	31	64.6	200	4	US-10-724-972A-7480	Sequence 7480, Ap
741	32	66.7	211	4	US-10-369-493-15289	Sequence 15289, A	814	31	64.6	227	4	US-10-425-115-352860	Sequence 352860,
742	32	66.7	243	4	US-10-369-493-15353	Sequence 12535, A	815	31	64.6	245	4	US-10-369-493-8828	Sequence 8828, A
743	32	66.7	278	4	US-10-156-761-12874	Sequence 12874, A	816	31	64.6	273	4	US-10-425-114-63557	Sequence 63557
744	32	66.7	280	4	US-10-264-049-2886	Sequence 2886, Ap	817	31	64.6	284	4	US-10-424-599-159588	Sequence 159588,
745	32	66.7	281	4	US-10-424-599-192043	Sequence 192043,	818	31	64.6	280	4	US-10-245-752-92	Sequence 92, Appl
746	32	66.7	304	4	US-10-072-012-583	Sequence 583, App	819	31	64.6	280	4	US-10-245-859-92	Sequence 92, Appl
747	32	66.7	305	4	US-10-188-012-5	Sequence 5, Appl	820	31	64.6	280	4	US-10-245-103-92	Sequence 92, Appl
748	32	66.7	305	4	US-10-188-012-7	Sequence 7, Appl	821	31	64.6	280	4	US-10-245-107-92	Sequence 92, Appl
749	32	66.7	305	5	US-10-663-497-5	Sequence 5, Appl	822	31	64.6	280	4	US-10-245-171-92	Sequence 92, Appl
750	32	66.7	305	5	US-10-663-497-7	Sequence 7, Appl	823	31	64.6	280	4	US-10-245-711-92	Sequence 92, Appl
751	32	66.7	365	4	US-10-264-237-2790	Sequence 2790, Ap	824	31	64.6	280	4	US-10-245-851-92	Sequence 92, Appl
752	32	66.7	365	4	US-10-411-910A-81	Sequence 81, Appl	825	31	64.6	280	4	US-10-245-883-92	Sequence 92, Appl
753	32	66.7	366	4	US-10-425-114-55567	Sequence 52567, A	826	31	64.6	280	4	US-10-237-535-92	Sequence 92, Appl
754	32	66.7	369	4	US-10-424-599-209179	Sequence 209179,	827	31	64.6	280	4	US-10-238-183-92	Sequence 92, Appl
755	32	66.7	450	3	US-09-809-665A-28	Sequence 28, Appl	828	31	64.6	280	4	US-10-238-283-92	Sequence 92, Appl
756	32	66.7	450	5	US-10-854-299-28	Sequence 28, Appl	829	31	64.6	280	4	US-10-238-370-92	Sequence 92, Appl
757	32	66.7	530	4	US-10-425-114-53842	Sequence 53842, A	830	31	64.6	280	4	US-10-245-055-92	Sequence 92, Appl

831	31	64.6	280	4	US-10-245-147-92	Sequence 92, Appl	904	31	64.6	280	4	US-10-246-080-92	Sequence 92, Appl
832	31	64.6	280	4	US-10-245-730-92	Sequence 92, Appl	905	31	64.6	280	4	US-10-246-121-92	Sequence 92, Appl
833	31	64.6	280	4	US-10-245-739-92	Sequence 92, Appl	906	31	64.6	280	4	US-10-246-305-92	Sequence 92, Appl
834	31	64.6	280	4	US-10-246-210-92	Sequence 92, Appl	907	31	64.6	280	4	US-10-246-929-92	Sequence 92, Appl
835	31	64.6	280	4	US-10-239-195-92	Sequence 92, Appl	908	31	64.6	280	4	US-10-247-036-92	Sequence 92, Appl
836	31	64.6	280	4	US-10-243-024-92	Sequence 92, Appl	909	31	64.6	280	4	US-10-247-255-92	Sequence 92, Appl
837	31	64.6	280	4	US-10-243-409-92	Sequence 92, Appl	910	31	64.6	280	4	US-10-248-810-92	Sequence 92, Appl
838	31	64.6	280	4	US-10-245-621-92	Sequence 92, Appl	911	31	64.6	280	4	US-10-248-910-92	Sequence 92, Appl
839	31	64.6	280	4	US-10-245-880-92	Sequence 92, Appl	912	31	64.6	280	4	US-10-248-008-92	Sequence 92, Appl
840	31	64.6	280	4	US-10-245-033-92	Sequence 92, Appl	913	31	64.6	280	4	US-10-248-074-92	Sequence 92, Appl
841	31	64.6	280	4	US-10-243-095-92	Sequence 92, Appl	914	31	64.6	280	4	US-10-248-505-92	Sequence 92, Appl
842	31	64.6	280	4	US-10-243-185-92	Sequence 92, Appl	915	31	64.6	280	4	US-10-248-574-92	Sequence 92, Appl
843	31	64.6	280	4	US-10-245-427-92	Sequence 92, Appl	916	31	64.6	280	4	US-10-248-574-92	Sequence 92, Appl
844	31	64.6	280	4	US-10-245-473-92	Sequence 92, Appl	917	31	64.6	280	4	US-10-243-261-92	Sequence 92, Appl
845	31	64.6	280	4	US-10-245-770-92	Sequence 92, Appl	918	31	64.6	280	4	US-10-243-282-92	Sequence 92, Appl
846	31	64.6	280	4	US-10-245-877-92	Sequence 92, Appl	919	31	64.6	280	4	US-10-244-402-92	Sequence 92, Appl
847	31	64.6	280	4	US-10-246-976-92	Sequence 92, Appl	920	31	64.6	280	4	US-10-244-431-92	Sequence 92, Appl
848	31	64.6	280	4	US-10-243-320-92	Sequence 92, Appl	921	31	64.6	280	4	US-10-245-164-92	Sequence 92, Appl
849	31	64.6	280	4	US-10-242-743-92	Sequence 92, Appl	922	31	64.6	280	4	US-10-244-972-92	Sequence 92, Appl
850	31	64.6	280	4	US-10-242-845-92	Sequence 92, Appl	923	31	64.6	280	4	US-10-197-942-92	Sequence 92, Appl
851	31	64.6	280	4	US-10-237-636-92	Sequence 92, Appl	924	31	64.6	280	4	US-10-238-196-92	Sequence 92, Appl
852	31	64.6	280	4	US-10-238-325-92	Sequence 92, Appl	925	31	64.6	280	4	US-10-238-196-92	Sequence 92, Appl
853	31	64.6	280	4	US-10-238-346-92	Sequence 92, Appl	926	31	64.6	280	4	US-10-245-013-92	Sequence 92, Appl
854	31	64.6	280	4	US-10-238-411-92	Sequence 92, Appl	927	31	64.6	281	4	US-10-767-701-38350	Sequence 92, Appl
855	31	64.6	280	4	US-10-243-124-92	Sequence 92, Appl	928	31	64.6	302	4	US-10-437-963-144914	Sequence 92, Appl
856	31	64.6	280	4	US-10-243-425-92	Sequence 92, Appl	929	31	64.6	313	4	US-10-425-115-340943	Sequence 92, Appl
857	31	64.6	280	4	US-10-243-446-92	Sequence 92, Appl	930	31	64.6	328	4	US-10-289-762-142	Sequence 92, Appl
858	31	64.6	280	4	US-10-245-874-92	Sequence 92, Appl	931	31	64.6	330	4	US-10-767-701-38418	Sequence 92, Appl
859	31	64.6	280	4	US-10-242-653-92	Sequence 92, Appl	932	31	64.6	337	4	US-10-371-701-25	Sequence 92, Appl
860	31	64.6	280	4	US-10-243-167-92	Sequence 92, Appl	933	31	64.6	337	4	US-10-389-566-1786	Sequence 92, Appl
861	31	64.6	280	4	US-10-243-388-92	Sequence 92, Appl	934	31	64.6	347	4	US-10-437-963-143218	Sequence 92, Appl
862	31	64.6	280	4	US-10-244-947-92	Sequence 92, Appl	935	31	64.6	357	4	US-10-425-113-352962	Sequence 92, Appl
863	31	64.6	280	4	US-10-244-968-92	Sequence 92, Appl	936	31	64.6	371	4	US-10-425-114-61472	Sequence 92, Appl
864	31	64.6	280	4	US-10-245-079-92	Sequence 92, Appl	937	31	64.6	390	5	US-10-450-763-60652	Sequence 92, Appl
865	31	64.6	280	4	US-10-245-127-92	Sequence 92, Appl	938	31	64.6	391	4	US-10-425-114-56277	Sequence 92, Appl
866	31	64.6	280	4	US-10-245-207-92	Sequence 92, Appl	939	31	64.6	404	4	US-10-320-797-3140	Sequence 92, Appl
867	31	64.6	280	4	US-10-245-646-92	Sequence 92, Appl	940	31	64.6	470	4	US-10-389-566-1043	Sequence 92, Appl
868	31	64.6	280	4	US-10-245-695-92	Sequence 92, Appl	941	31	64.6	474	5	US-10-887-104-3	Sequence 92, Appl
869	31	64.6	280	4	US-10-245-699-92	Sequence 92, Appl	942	31	64.6	501	3	US-09-323-9980-55	Sequence 92, Appl
870	31	64.6	280	4	US-10-245-699-92	Sequence 92, Appl	943	31	64.6	515	4	US-10-425-114-40728	Sequence 92, Appl
871	31	64.6	280	4	US-10-245-737-92	Sequence 92, Appl	944	31	64.6	531	4	US-10-424-559-190122	Sequence 92, Appl
872	31	64.6	280	4	US-10-245-878-92	Sequence 92, Appl	945	31	64.6	536	4	US-10-369-493-19495	Sequence 92, Appl
873	31	64.6	280	4	US-10-245-890-92	Sequence 92, Appl	946	31	64.6	562	4	US-10-369-493-6784	Sequence 92, Appl
874	31	64.6	280	4	US-10-245-899-92	Sequence 92, Appl	947	31	64.6	585	5	US-10-489-425-46	Sequence 92, Appl
875	31	64.6	280	4	US-10-247-058-92	Sequence 92, Appl	948	31	64.6	606	3	US-09-071-035-240	Sequence 92, Appl
876	31	64.6	280	4	US-10-245-854-92	Sequence 92, Appl	949	31	64.6	606	4	US-10-206-576-240	Sequence 92, Appl
877	31	64.6	280	4	US-10-237-471-92	Sequence 92, Appl	950	31	64.6	606	5	US-10-912-362-240	Sequence 92, Appl
878	31	64.6	280	4	US-10-238-261-92	Sequence 92, Appl	951	31	64.6	637	6	US-10-270-333-168	Sequence 92, Appl
879	31	64.6	280	4	US-10-238-324-92	Sequence 92, Appl	952	31	64.6	637	6	US-11-097-143-33003	Sequence 92, Appl
880	31	64.6	280	4	US-10-241-860-92	Sequence 92, Appl	953	31	64.6	703	5	US-10-450-763-46352	Sequence 92, Appl
881	31	64.6	280	4	US-10-242-172-92	Sequence 92, Appl	954	31	64.6	710	4	US-10-425-115-338816	Sequence 92, Appl
882	31	64.6	280	4	US-10-242-552-92	Sequence 92, Appl	955	31	64.6	732	4	US-10-282-122A-54856	Sequence 92, Appl
883	31	64.6	280	4	US-10-242-990-92	Sequence 92, Appl	956	31	64.6	764	4	US-10-425-114-54331	Sequence 92, Appl
884	31	64.6	280	4	US-10-243-023-92	Sequence 92, Appl	957	31	64.6	795	4	US-10-156-761-9690	Sequence 92, Appl
885	31	64.6	280	4	US-10-243-103-92	Sequence 92, Appl	958	31	64.6	805	4	US-10-369-493-22100	Sequence 92, Appl
886	31	64.6	280	4	US-10-243-376-92	Sequence 92, Appl	959	31	64.6	845	3	US-09-815-242-5433	Sequence 92, Appl
887	31	64.6	280	4	US-10-243-326-92	Sequence 92, Appl	960	31	64.6	867	3	US-09-815-242-10654	Sequence 92, Appl
888	31	64.6	280	4	US-10-243-364-92	Sequence 92, Appl	961	31	64.6	867	3	US-10-282-122A-56931	Sequence 92, Appl
889	31	64.6	280	4	US-10-243-944-92	Sequence 92, Appl	962	31	64.6	869	3	US-09-815-242-12266	Sequence 92, Appl
890	31	64.6	280	4	US-10-244-995-92	Sequence 92, Appl	963	31	64.6	885	4	US-10-282-122A-44884	Sequence 92, Appl
891	31	64.6	280	4	US-10-244-995-92	Sequence 92, Appl	964	31	64.6	885	4	US-10-437-963-160466	Sequence 92, Appl
892	31	64.6	280	4	US-10-245-230-92	Sequence 92, Appl	965	31	64.6	921	4	US-10-618-941-89	Sequence 92, Appl
893	31	64.6	280	4	US-10-245-253-92	Sequence 92, Appl	966	31	64.6	924	4	US-10-425-115-358126	Sequence 92, Appl
894	31	64.6	280	4	US-10-245-479-92	Sequence 92, Appl	967	31	64.6	940	4	US-10-282-122A-52332	Sequence 92, Appl
895	31	64.6	280	4	US-10-245-499-92	Sequence 92, Appl	968	31	64.6	942	4	US-10-346-241-2	Sequence 92, Appl
896	31	64.6	280	4	US-10-245-772-92	Sequence 92, Appl	969	31	64.6	956	4	US-10-346-241-6	Sequence 92, Appl
897	31	64.6	280	4	US-10-245-811-92	Sequence 92, Appl	970	31	64.6	1033	4	US-10-723-860-1420	Sequence 92, Appl
898	31	64.6	280	4	US-10-245-812-92	Sequence 92, Appl	971	31	64.6	1076	5	US-10-756-149-5065	Sequence 92, Appl
899	31	64.6	280	4	US-10-245-852-92	Sequence 92, Appl	972	31	64.6	1084	5	US-10-437-963-144916	Sequence 92, Appl
900	31	64.6	280	4	US-10-245-875-92	Sequence 92, Appl	973	31	64.6	1117	4	US-10-437-963-144917	Sequence 92, Appl
901	31	64.6	280	4	US-10-245-881-92	Sequence 92, Appl	974	31	64.6	1123	4	US-10-425-114-62713	Sequence 92, Appl
902	31	64.6	280	4	US-10-245-911-92	Sequence 92, Appl	975	31	64.6				
903	31	64.6	280	4	US-10-245-913-92	Sequence 92, Appl	976	31	64.6				

```
977 31 64.6 1127 5 US-10-732-923-3322 Sequence 3322, App
978 31 64.6 1171 4 US-10-180-919-2 Sequence 2, Appli
979 31 64.6 1180 4 US-10-225-567A-178 Sequence 178, App
980 31 64.6 1180 4 US-10-722-357-16 Sequence 16, Appl
981 31 64.6 1198 4 US-10-156-761-8467 Sequence 8467, Ap
982 31 64.6 1203 4 US-10-027-923-5 Sequence 5, Appli
983 31 64.6 1203 5 US-10-887-104-2 Sequence 2, Appli
984 31 64.6 1212 4 US-10-027-923-4 Sequence 4, Appli
985 31 64.6 1212 4 US-10-346-241-7 Sequence 7, Appli
986 31 64.6 1218 5 US-10-967-091-24 Sequence 24, Appl
987 31 64.6 1223 5 US-09-071-035-236 Sequence 236, App
988 31 64.6 1223 4 US-10-206-576-236 Sequence 236, App
989 31 64.6 1223 5 US-10-912-362-236 Sequence 236, App
990 31 64.6 1201 3 US-09-071-035-234 Sequence 234, App
991 31 64.6 1201 3 US-09-071-035-238 Sequence 238, App
992 31 64.6 1201 3 US-09-071-035-242 Sequence 242, App
993 31 64.6 1301 4 US-10-206-576-234 Sequence 234, App
994 31 64.6 1301 4 US-10-206-576-238 Sequence 238, App
995 31 64.6 1301 4 US-10-206-576-242 Sequence 242, App
996 31 64.6 1301 5 US-10-912-362-234 Sequence 234, App
997 31 64.6 1301 5 US-10-912-362-238 Sequence 238, App
998 31 64.6 1301 5 US-10-912-362-242 Sequence 242, App
999 31 64.6 1478 5 US-10-732-923-3353 Sequence 3353, Ap
1000 31 64.6 1589 5 US-10-923-035-65 Sequence 65, Appl
```

ALIGNMENTS

```
RESULT 1
US-09-759-960-17
; Sequence 17, Application US/09759960
; Patent No. US2001000639A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
```

US-09-759-960-17

Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLPET 9
Db 1 YMLDLPET 9

RESULT 2

US-09-891-823-3

; Sequence 3, Application US/09891823

; Publication No. US20020110566A1

; GENERAL INFORMATION:

; APPLICANT: Neeffe, John R.

; APPLICANT: Boux, Leslie J.

; APPLICANT: Minnett, Mark T.

; APPLICANT: Goldstone, Stephen E.

; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT

; FILE REFERENCE: 12071-003001

; CURRENT APPLICATION NUMBER: US/09/891,823

; CURRENT FILING DATE: 2001-10-19

; PRIOR APPLICATION NUMBER: US 60/214,202

; PRIOR FILING DATE: 2000-06-26

; NUMBER OF SEQ ID NOS: 140

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 3

; LENGTH: 9

; TYPE: PRT

; ORGANISM: Human papilloma virus

US-09-891-823-3

Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLPET 9
Db 1 YMLDLPET 9

RESULT 3

US-09-909-460-104

; Sequence 104, Application US/0909460

; Publication No. US20020182258A1

; GENERAL INFORMATION:

; APPLICANT: Putnam, David

; APPLICANT: Hedley, Mary Lynn

; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC

; FILE REFERENCE: 08191/014001

; CURRENT APPLICATION NUMBER: US/09/909,460

; CURRENT FILING DATE: 2001-07-18

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346

; PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27

; NUMBER OF SEQ ID NOS: 114

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 104

; LENGTH: 9

; TYPE: PRT

; ORGANISM: Human papilloma virus

US-09-909-460-104

Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLPET 9
Db 1 YMLDLPET 9

Db 1 YMLDQPET 9

RESULT 4
US-09-872-836-104
; Sequence 104, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
; APPLICANT: Berman, Shikha P.
; APPLICANT: McKeever, Una
; APPLICANT: Hedley, Mary Lynne
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-104

Query Match 100.0%; Score 48; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
1 YMLDQPET 9

RESULT 5
US-10-128-711-66
; Sequence 66, Application US/10128711
; Publication No. US20030099634A1
; GENERAL INFORMATION:
; APPLICANT: VITIELLO, Maria A.
; CHESTNUT, Robert W.
; SETYE, Alessandro D.
; CELIS, Estebean
; GRAY, Howard
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; NUMBER OF SEQUENCES: 153
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Townsend and Townsend Kourile and Crew
; STREET: Steuart Street Tower, One Market Plaza
; CITY: San Francisco
; STATE: California
; COUNTRY: US
; ZIP: 94105-1493
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/128,711
; FILING DATE: 22-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/197,484
; FILING DATE: 16-FEB-1994
; APPLICATION NUMBER: US 07/935,811
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: US 07/874,491
; FILING DATE: 27-APR-1992
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; APPLICATION NUMBER: US 07/749,568

FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:

NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
; INFORMATION FOR SEQ ID NO: 66:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 66:
US-10-128-711-66

Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
1 YMLDQPET 9

RESULT 6
US-10-365-908-3
; Sequence 3, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/691,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-3

Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
1 YMLDQPET 9

RESULT 7
US-10-603-062-17
; Sequence 17, Application US/10603062
; Publication No. US20040229809A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; Chicz, Roman M.
; Collins, Edward J.
; Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; PROTEIN

NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/603,062
FILING DATE: 24-Jun-2003
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 17:
US-10-603-062-17
Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;
QY 1 YMLDQPET 9
DB 1 YMLDQPET 9
RESULT 8
US-10-871-138-3
Sequence 3, Application US/10871138
Publication No. US20040235741A1
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/871,138
CURRENT FILING DATE: 2004-06-18
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 3
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-871-138-3

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;
QY 1 YMLDQPET 9
DB 1 YMLDQPET 9
RESULT 9
US-10-758-970-104
Sequence 104, Application US/10758970
Publication No. US20050037086A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Hsu, Yung-Yuen
APPLICANT: Tyo, Michael
TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
FILE REFERENCE: 08191-012001
CURRENT APPLICATION NUMBER: US/10/758,970
CURRENT FILING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: US/09/715,708A
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: US 60/166,516
PRIOR FILING DATE: 1999-11-19
NUMBER OF SEQ ID NOS: 109
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 104
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-758-970-104

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

QY 1 YMLDQPET 9
DB 1 YMLDQPET 9

RESULT 10
US-10-751-845-58
Sequence 58, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 58
LENGTH: 9
TYPE: PRT
ORGANISM: Human Papilloma virus
US-10-751-845-58

Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

QY 1 YMLDQPET 9

Db 1 YMLDLOPET 9

RESULT 11

US-09-847-185-19
Sequence 19, Application US/09847185

Patent No. US20020076392A1
GENERAL INFORMATION:

APPLICANT: Soo Hoo, William
TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
RESPONSE USING SAME

NUMBER OF SEQUENCES: 50

CORRESPONDENCE ADDRESS:

ADDRESSEE: CAMPBELL & FLORES, LLP

STREET: 4370 La Jolla Village Drive, Suite 700

CITY: San Diego

STATE: California

COUNTRY: United States

ZIP: 92121

COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/847,185

FILING DATE: 01-May-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/201,931

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Campbell, Cathryn A.

REGISTRATION NUMBER: 31,815

REFERENCE/DOCKET NUMBER: P-1M 2442

TELECOMMUNICATION INFORMATION:

TELEPHONE: (619)535-9001

TELEFAX: (619)535-8949

INFORMATION FOR SEQ ID NO: 19:

SEQUENCE CHARACTERISTICS:

LENGTH: 10 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 19:

US-09-847-185-19

Query Match 100.0%; Score 48; DB 3; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9

Db 1 YMLDLOPET 9

RESULT 12
US-09-835-853-22
Sequence 22, Application US/09835853

Patent No. US20020165136A1
GENERAL INFORMATION:

APPLICANT: BASERGA, Renato L.

APPLICANT: RESNICOFF, Mariana

APPLICANT: HUANG, Ziwei

TITLE OF INVENTION: MHC PEPTIDES AND METHODS OF USE

NUMBER OF SEQUENCES: 23

CORRESPONDENCE ADDRESS:

ADDRESSEE: HALE and DORR LLP

STREET: 1455 Pennsylvania Avenue, N.W.

CITY: Washington

STATE: D.C.

COUNTRY: USA

ZIP: 20004

COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/835,853

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/704,344

FILING DATE: 28-AUG-1996

ATTORNEY/AGENT INFORMATION:

NAME: WIXON, Henry N.

REGISTRATION NUMBER: 32,073

REFERENCE/DOCKET NUMBER: 104322.196

TELECOMMUNICATION INFORMATION:

TELEPHONE: (202) 942-8459

TELEFAX: (202) 942-8484

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:

LENGTH: 10 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: NO

ANTI-SENSE: NO

US-09-835-853-22

Query Match 100.0%; Score 48; DB 3; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9

Db 1 YMLDLOPET 9

RESULT 13
US-09-739-466C-13
Sequence 13, Application US/09739466C

Patent No. US20050107585A1
GENERAL INFORMATION:

APPLICANT: MURRAY, JOSEPH S

APPLICANT: SIADHAN, TERUNA J

APPLICANT: HU, YONGBO

TITLE OF INVENTION: SIGNAL-1/SIGNAL-2 BIFUNCTIONAL PEPTIDE INHIBITORS

FILE REFERENCE: 23902-08805

CURRENT APPLICATION NUMBER: US/09/739,466C

CURRENT FILING DATE: 2000-12-18

NUMBER OF SEQ ID NOS: 46

SOFTWARE: Patentin Ver. 3.2

SEQ ID NO 13

LENGTH: 10

TYPE: PRT

ORGANISM: Human papillomavirus

US-09-739-466C-13

Query Match 100.0%; Score 48; DB 3; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9

Db 1 YMLDLOPET 9

RESULT 14
US-10-133-210-271
Sequence 271, Application US/10133210

Publication No. US20030103964A1
GENERAL INFORMATION:
APPLICANT: Delisi, Charles
APPLICANT: Berzofsky, Jay
APPLICANT: Gulukota, Kamalakara
APPLICANT: Vaccaro, Dennis
APPLICANT: Meng, Zhiping
APPLICANT: Zhang, Chao
TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND
TITLE OF INVENTION: COMPOSITIONS THEREOF
FILE REFERENCE: BU-035AX
CURRENT APPLICATION NUMBER: US/10/133,210
CURRENT FILING DATE: 2002-04-26
NUMBER OF SEQ ID NOS: 281
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 271
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-133-210-271

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPERT 9
Db 1 YMLDQPERT 9

RESULT 15
US-10-224-286-19
Sequence 19, Application US/10224286
Publication No. US20030108517A1
GENERAL INFORMATION:
APPLICANT: Soo Hoo, William
TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
RESPONSE USING SAME
NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS:
ADDRESSEE: CAMPBELL & FLORES, LLP
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUNTRY: United States
ZIP: 92121
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/224,286
FILING DATE: 19-Aug-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/902,516
FILING DATE: 29-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-1M 2442
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)535-9001
TELEFAX: (619)535-8949
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-10-224-286-19

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPERT 9
Db 1 YMLDQPERT 9

RESULT 16
US-10-177-390-33
Sequence 33, Application US/10177390
Publication No. US20030143743A1
GENERAL INFORMATION:
APPLICANT: Schuler, Gerold
APPLICANT: N.V. Antwerp Innovatiecentrum
TITLE OF INVENTION: Improved Transfection of Eucaryotic Cells with Linear
TITLE OF INVENTION: Polynucleotides by Electroporation
FILE REFERENCE: 021505wo/JH/ml
CURRENT APPLICATION NUMBER: US/10/177,390
CURRENT FILING DATE: 2002-06-20
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 33
LENGTH: 10
TYPE: PRT
ORGANISM: Influenza virus
US-10-177-390-33

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQPERT 9
Db 1 YMLDQPERT 9

RESULT 17
US-10-406-317-30
Sequence 30, Application US/10406317
Publication No. US2004001958A1
GENERAL INFORMATION:
APPLICANT: Schlom, Jeffrey;
APPLICANT: Hodge, James;
APPLICANT: Panicali, Dennis
TITLE OF INVENTION: A recombinant vector expressing multiple constimulatory
TITLE OF INVENTION: molecules and uses thereof
FILE REFERENCE: 38163-0189
CURRENT APPLICATION NUMBER: US/10/406,317
CURRENT FILING DATE: 2003-04-04
PRIOR APPLICATION NUMBER: US/09/856,988
PRIOR FILING DATE: 2001-05-30
PRIOR APPLICATION NUMBER: PCT/US99/26866
PRIOR FILING DATE: 1999-11-12
PRIOR APPLICATION NUMBER: 60/111,582
PRIOR FILING DATE: 1998-12-09
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 30
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC
OTHER INFORMATION: PEPTIDE
US-10-406-317-30

Query Match 100.0%; Score 48; DB 4; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQEP 9
Db 1 YMLDQEP 9

RESULT 18
US-10-297-168-30
; Sequence 30, Application US/10297168
; Publication No. US2004009195A1
; GENERAL INFORMATION:
; APPLICANT: SCHLOM, Jeffrey
; APPLICANT: GREINER, John W.
; APPLICANT: KASS, Erik
; APPLICANT: PANICALI, Dennis
; TITLE OF INVENTION: RECOMBINANT NON-REPLICATING VIRUS EXPRESSING GM-CSF AND
; TITLE OF INVENTION: USES THEREOF TO ENHANCE IMMUNE RESPONSES
; FILE REFERENCE: 38163-0167
; CURRENT APPLICATION NUMBER: US/10/297,168
; PRIOR FILING DATE: 2002-12-03
; PRIOR APPLICATION NUMBER: PCT/US01/19201
; PRIOR FILING DATE: 2001-06-05
; PRIOR APPLICATION NUMBER: US60/211,717
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 30
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-297-168-30

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQEP 9
Db 1 YMLDQEP 9

RESULT 19
US-10-777-053-329
; Sequence 329, Application US/10777053
; Publication No. US2004013208A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANNK.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; PRIOR FILING DATE: 2004-02-10
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 329
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus 16
US-10-777-053-329

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQEP 9
Db 1 YMLDQEP 9

RESULT 20
US-10-777-053-542
; Sequence 542, Application US/10777053
; Publication No. US2004013208A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANNK.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; PRIOR FILING DATE: 2004-02-10
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 542
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-777-053-542

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQEP 9
Db 1 YMLDQEP 9

RESULT 21
US-10-837-217-329
; Sequence 329, Application US/10837217
; Publication No. US20040203051A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANNK.022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 329
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus 16
US-10-837-217-329

Query Match 100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDQEP 9
Db 1 YMLDQEP 9

RESULT 22

US-10-837-217-542
; Sequence 542, Application US/10837217
; Publication No. US20040203051A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK, 022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; CURRENT FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 542
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-837-217-542

Query Match 100.0%; Score 48; DB 4; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPPT 9
| | | | |
| | | | |
Db 1 YMLDLOPPT 9

RESULT 23

US-10-890-526-19
; Sequence 19, Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Jochims, Ingrid
; APPLICANT: Nieland, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; CURRENT FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-19

Query Match 100.0%; Score 48; DB 5; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPPT 9
| | | | |
| | | | |
Db 1 YMLDLOPPT 9

RESULT 24

US-10-751-845-105
; Sequence 105, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 105
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-105

Query Match 100.0%; Score 48; DB 5; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPPT 9
| | | | |
| | | | |
Db 1 YMLDLOPPT 9

RESULT 25

US-10-776-521B-366
; Sequence 366, Application US/10776521B
; Publication No. US20050202033A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, Jessica
; APPLICANT: Prince-Conane, Kenya
; APPLICANT: Mehta, Sunil
; APPLICANT: Slusarewicz, Paul
; APPLICANT: Andjelic, Sofija
; APPLICANT: Barber, Brian
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED VACCINES AND
; TITLE OF INVENTION: IMMUNOTHERAPIES
; FILE REFERENCE: 8449-405-999
; CURRENT APPLICATION NUMBER: US/10/776,521B
; CURRENT FILING DATE: 2004-02-12
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
; PRIOR APPLICATION NUMBER: 60/462,469
; PRIOR FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: 60/447,142
; PRIOR FILING DATE: 2003-02-13
; NUMBER OF SEQ ID NOS: 419
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 366
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Heat shock protein binding domain
US-10-776-521B-366

Query Match 100.0%; Score 48; DB 5; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPERT 9
| | | | |
Db 1 YMLDQPERT 9

RESULT 26

US-10-820-067A-877
; Sequence 877, Application US/10820067A
; Publication No. US20050214312A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, J.
; APPLICANT: Prince-Cohane, K.
; APPLICANT: Mehta, S.
; APPLICANT: Slusarewicz, P.
; APPLICANT: Andjelic, S.
; APPLICANT: Barber, B.
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED
; TITLE OF INVENTION: VACCINES AND IMMUNOTHERAPIES
; FILE REFERENCE: 8449-406-999
; CURRENT FILING DATE: 2004-04-08
; PRIOR APPLICATION NUMBER: 60/462,469
; PRIOR FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; NUMBER OF SEQ ID NOS: 926
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 877
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Heat shock-protein binding motif to form hybrid antigen
US-10-820-067A-877

Query Match 100.0%; Score 48; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPERT 9
| | | | |
Db 1 YMLDQPERT 9

RESULT 27

US-10-062-710-206
; Sequence 206, Application US/10062710
; Publication No. US20030049253A1
; GENERAL INFORMATION:
; APPLICANT: Li, Frank Q.
; APPLICANT: Chu, Yong-Liang
; APPLICANT: Qiu, Jian-Tai
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of
; TITLE OF INVENTION: MHC-Recognized Epitopes
; TITLE OF INVENTION: Via Peptide Vaccines
; FILE REFERENCE: 3781-001-27
; CURRENT APPLICATION NUMBER: US/10/062,710
; CURRENT FILING DATE: 2002-02-05
; PRIOR APPLICATION NUMBER: US 60/310,498
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 232
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 206
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: T Cell epitopes
US-10-062-710-206

Query Match 100.0%; Score 48; DB 4; Length 11;

Best Local Similarity 100.0%; Pred. No. 0.033;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPERT 9
| | | | |
Db 2 YMLDQPERT 10

RESULT 28

US-10-648-547-72
; Sequence 72, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 72
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-72

Query Match 100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPERT 9
| | | | |
Db 1 YMLDQPERT 9

RESULT 29

US-10-648-547-80
; Sequence 80, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 80
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-80

Query Match 100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPERT 9
| | | | |
Db 2 YMLDQPERT 10

RESULT 30

```

US-10-648-547-92
Sequence 92, Application US/10648547
Publication No. US20040147044A1
GENERAL INFORMATION:
APPLICANT: Mittleman, Abraham
APPLICANT: Kanduc, Darja
TITLE OF INVENTION: Improved Antigens
FILE REFERENCE: 12354/9
CURRENT APPLICATION NUMBER: US/10/648,547
CURRENT FILING DATE: 2003-08-25
PRIOR APPLICATION NUMBER: 10/306,541
PRIOR FILING DATE: 11-25-2002
PRIOR APPLICATION NUMBER: 60/333,249
PRIOR FILING DATE: 11-23-2001
NUMBER OF SEQ ID NOS: 108
SOFTWARE: WordPerfect 8.0 for Windows
SEQ ID NO 92
LENGTH: 15
TYPE: PRT
ORGANISM: human papillomavirus
US-10-648-547-92

```

Query Match	100.0%;	Score 48;	DB 4;	Length 15;
Best Local Similarity	100.0%;	Pred. No. 0.045;		
Matches	9;	Conservative	0;	Mismatches 0;
			Indels	0;
			Gaps	0;

```
QY      1 YMLDLQPET 9
        |||||
Db      5 YMLDLQPET 13
```

```

RESULT 31
US-10-476-570-45
: Sequence 45, Application US/10476570
: Publication No. US20040170644A1
: GENERAL INFORMATION:
: APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
: APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
: APPLICANT: MAILLERE, Bernard
: APPLICANT: BOURGAULT-VILLADA, Isabelle
: APPLICANT: POUVELE-MORATILLE, Sandra
: APPLICANT: GUILLET, Jean-Gerard
: TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
: TITLE OF INVENTION: papillomavirus proteins and uses thereof
: FILE REFERENCE: 45636-5071-US
: CURRENT APPLICATION NUMBER: US/10/476,570
: CURRENT FILING DATE: 2003-11-04
: PRIOR APPLICATION NUMBER: PCT/FR02/01533
: PRIOR FILING DATE: 2002-05-03
: PRIOR APPLICATION NUMBER: FR 01 05980
: PRIOR FILING DATE: 2001-05-04
: NUMBER OF SEQ ID NOS: 63
: SOFTWARE: PatentIn Ver. 2.1
: SEQ ID NO 45
: LENGTH: 15
: TYPE: PRT
: ORGANISM: artificial sequence
: FEATURE:
: OTHER INFORMATION: Description of the artificial sequence: peptide E7 6-20
: US-10-476-570-45

```

```

Query Match      100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0

```

QY	1	YMLDLQPET	9
Db	6	YMLDLQPET	14

RESULT 32
US-10-476-570-46
; Sequence 46, Application US/10476570

```

1 Publication No. US20040170644A1
2 GENERAL INFORMATION:
3 APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
4 APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
5 APPLICANT: MAILLIERE, Bernard
6 APPLICANT: BOURGAULT-VILLADA, Isabelle
7 APPLICANT: BOUYELLE-MORATILLE, Sandra
8 APPLICANT: GUILLET, Jean-Gerard
9 TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
10 TITLE OF INVENTION: papillomavirus proteins and uses thereof
11 FILE REFERENCE: 45636-5071-US
12 CURRENT APPLICATION NUMBER: US/10/476,570
13 PRIORITY FILING DATE: 2003-11-04
14 PRIOR APPLICATION NUMBER: PCT/FR02/01533
15 PRIOR FILING DATE: 2002-05-03
16 PRIOR APPLICATION NUMBER: FR 01 05980
17 PRIOR FILING DATE: 2001-05-04
18 NUMBER OF SEQ ID NOS: 63
19 SOFTWARE: Patentin Ver. 2.1
20 SEQ ID NO 46

```

Query Match	100.0%	Score 48	DB 4	Length 15
Best Local Similarity	100.0%	Pred. No. 0.045		
Matches	9	Conservative	0	Indels 0; Gaps 0
		Mismatches	0	

Qy	1	YMLDLQRET	9
Db	3	YMLDLQRET	11

```

RESULT 33
US-10-306-541-72
Sequence 72, Application US/10306541
Publication No. US20040171081A1
GENERAL INFORMATION:
APPLICANT: Mittleman, Abraham
TITLE OF INVENTION: Improved Antigens
FILE REFERENCE: 12354/4
CURRENT APPLICATION NUMBER: US/10/306,541
CURRENT FILING DATE: 2003-11-25
PRIOR APPLICATION NUMBER: 60/333,249
PRIOR FILING DATE: 2001-11-23
NUMBER OF SEQ ID NOS: 108
SOFTWARE: Wordperfect 8.0 for Windows
SEQ ID NO 72
LENGTH: 15
TYPE: PRT
ORGANISM: human papillomavirus
US-10-306-541-72

```

Query Match	100.0%	Score 48	DB 4	length 15
Best Local Similarity	100.0%	Pred. No. 0.045		
Matches	9	Conservative	0	Indels 0
		Mismatches	0	Gaps 0

Qy	1	YMLDLQPET	9
Db	1	YMLDLQPET	9

RESULT 34
US-10-306-541-80
; Sequence 80, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittelman, Abraham
; APPLICANT: Kanduc, Darya

```

; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 80
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-80
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 YMLDLOPET 9
        |||||
Db      2 YMLDLOPET 10
```

```
RESULT 35
US-10-306-541-92
; Sequence 92, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittleman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 92
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-92
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 YMLDLOPET 9
        |||||
Db      5 YMLDLOPET 13
```

```
RESULT 36
US-10-751-845-67
; Sequence 67, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
```

```

; SEQ ID NO 67
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-67
```

```
Query Match          100.0%; Score 48; DB 5; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 YMLDLOPET 9
        |||||
Db      5 YMLDLOPET 13
```

```
RESULT 37
US-10-432-465-44
; Sequence 44, Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John
; APPLICANT: Kautmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-44
```

```
Query Match          100.0%; Score 48; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.061;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 YMLDLOPET 9
        |||||
Db      11 YMLDLOPET 19
```

```
RESULT 38
US-10-476-570-14
; Sequence 14, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: BOURVILLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
```

SEQ ID NO 14
LENGTH: 20
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E7 1-20
US-10-476-570-14

Query Match 100.0%; Score 48; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.061;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 39
US-10-890-526-69
Sequence 69, Application US/10890526
Publication No. US20040258708A1
GENERAL INFORMATION:
APPLICANT: Jochims, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
TITLE OF INVENTION: Therapy
FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/10/890,526
CURRENT FILING DATE: 2004-07-13
PRIOR APPLICATION NUMBER: US/09/980,177
PRIOR FILING DATE: 2002-05-02
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 69
LENGTH: 20
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-890-526-69

Query Match 100.0%; Score 48; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.061;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
Db 11 YMLDQPT 19

RESULT 40
US-10-476-570-15
Sequence 15, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
TITLE OF INVENTION: Papillomavirus proteins and uses thereof
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04

NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 15
LENGTH: 21
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E7 7-27
US-10-476-570-15

Query Match 100.0%; Score 48; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
Db 5 YMLDQPT 13

RESULT 41
US-10-776-521B-378
Sequence 378, Application US/10776521B
Publication No. US20050202033A1
GENERAL INFORMATION:
APPLICANT: Flechner, Jessica
APPLICANT: Prince-Cohane, Kenya
APPLICANT: Mehta, Sunil
APPLICANT: Slusarewicz, Paul
APPLICANT: Andjelic, Sofija
APPLICANT: Barber, Brian
TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED VACCINES AND
TITLE OF INVENTION: IMMUNOTHERAPIES
FILE REFERENCE: 8449-405-999
CURRENT APPLICATION NUMBER: US/10/776,521B
CURRENT FILING DATE: 2004-02-12
PRIOR APPLICATION NUMBER: 60/503,417
PRIOR FILING DATE: 2003-09-16
PRIOR APPLICATION NUMBER: 60/463,746
PRIOR FILING DATE: 2003-04-18
PRIOR APPLICATION NUMBER: 60/462,469
PRIOR FILING DATE: 2003-04-11
PRIOR APPLICATION NUMBER: 60/447,142
PRIOR FILING DATE: 2003-02-13
NUMBER OF SEQ ID NOS: 419
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 378
LENGTH: 21
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Hybrid antigen
US-10-776-521B-378

Query Match 100.0%; Score 48; DB 5; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
Db 1 YMLDQPT 9

RESULT 42
US-10-476-570-57
Sequence 57, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard

```

; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; TITLE OF INVENTION: Papillomavirus proteins and uses thereof
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 57
; LENGTH: 23
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 3-25
US-10-476-570-57
```

```
Query Match          100.0%; Score 48; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.071;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 YMLDLOPET 9
    |||||
Db 9 YMLDLOPET 17
```

```

RESULT 43
US-10-858-384-14
; Sequence 14, Application US/10858384
; Publication No. US2005003025A1
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; CURRENT FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 14
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of the Artificial Sequence: Peptide fragment
; OTHER INFORMATION: for E7 of HPV
US-10-858-384-14
```

```
Query Match          100.0%; Score 48; DB 5; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.071;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 YMLDLOPET 9
    |||||
Db 9 YMLDLOPET 17
```

```

RESULT 44
US-09-828-645-3
; Sequence 3, Application US/09828645
; Publication No. US20030027750A1
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
```

```

; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-3
```

```
Query Match          100.0%; Score 48; DB 3; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 YMLDLOPET 9
    |||||
Db 6 YMLDLOPET 14
```

```

RESULT 45
US-09-828-645-7
; Sequence 7, Application US/09828645
; Publication No. US20030027750A1
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
; NAME/KEY: misc.feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: Xaa = L-carboxymethylcysteine
US-09-828-645-7
```

```
Query Match          100.0%; Score 48; DB 3; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 YMLDLOPET 9
    |||||
Db 6 YMLDLOPET 14
```

```

RESULT 46
US-10-827-007-3
; Sequence 3, Application US/10827007
; Publication No. US20050042599A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; TITLE OF INVENTION: Contemplating Peptides From the E7 Early Coding Region of HPV 1
; FILE REFERENCE: 3352-2-1-3
; CURRENT APPLICATION NUMBER: US/10/827,007
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
```

;; PRIOR FILING DATE: 2000-04-05
;; NUMBER OF SEQ ID NOS: 8
;; SOFTWARE: PatentIn version 3.2
;; SEQ ID NO 3
;; LENGTH: 30
;; TYPE: PRT
;; ORGANISM: Artificial
;; FEATURE:
US-10-827-007-3
OTHER INFORMATION: Derived from the E7 early coding region of HPV-16

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
|||
Db 6 YMLDQPET 14

RESULT 47
US-10-827-007-7
Sequence 7, Application US/10827007
Publication No. US20050042599A1
GENERAL INFORMATION:
APPLICANT: Impact Diagnostics
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
TITLE OF INVENTION: Contemplating Peptides From the E7 Early Coding Region of HPV 16
FILE REFERENCE: 3352-2-1-3
CURRENT APPLICATION NUMBER: US/10/827,007
PRIOR FILING DATE: 2004-04-19
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: US 60/194,796
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.2
SEQ ID NO 7
LENGTH: 30
TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (19)..(19)
OTHER INFORMATION: Xaa = L-Carboxymethylcysteine
US-10-827-007-7

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
|||
Db 6 YMLDQPET 14

RESULT 48
US-10-827-083-3
Sequence 3, Application US/10827083
Publication No. US20050042600A1
GENERAL INFORMATION:
APPLICANT: Impact Diagnostics
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
TITLE OF INVENTION: Contemplating Peptides From the E7 Early Coding Region of HPV 16
FILE REFERENCE: 3352-2-1-4
CURRENT APPLICATION NUMBER: US/10/827,083
PRIOR FILING DATE: 2004-04-19
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2001-04-05

;; PRIOR APPLICATION NUMBER: US 60/194,796
;; PRIOR FILING DATE: 2000-04-05
;; NUMBER OF SEQ ID NOS: 8
;; SOFTWARE: PatentIn version 3.2
;; SEQ ID NO 3
;; LENGTH: 30
;; TYPE: PRT
;; ORGANISM: Artificial
;; FEATURE:
US-10-827-083-3
OTHER INFORMATION: Derived from the E7 early coding region of HPV-16

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
|||
Db 6 YMLDQPET 14

RESULT 49
US-10-827-083-7
Sequence 7, Application US/10827083
Publication No. US20050042600A1
GENERAL INFORMATION:
APPLICANT: Impact Diagnostics
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
TITLE OF INVENTION: Contemplating Peptides From the E7 Early Coding Region of HPV 16
FILE REFERENCE: 3352-2-1-4
CURRENT APPLICATION NUMBER: US/10/827,083
PRIOR FILING DATE: 2004-04-19
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: US 60/194,796
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.2
SEQ ID NO 7
LENGTH: 30
TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (19)..(19)
OTHER INFORMATION: Xaa = L-Carboxymethylcysteine
US-10-827-083-7

Query Match 100.0%; Score 48; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDQPET 9
|||
Db 6 YMLDQPET 14

RESULT 50
US-09-739-466C-46
Sequence 46, Application US/09739466C
Publication No. US20050107585A1
GENERAL INFORMATION:
APPLICANT: MURRAY, JOSEPH S
APPLICANT: SIHMAN, TERUNA J
APPLICANT: HU, YONGBO
TITLE OF INVENTION: SIGNAL-1/SIGNAL-2 BIFUNCTIONAL PEPTIDE INHIBITORS
FILE REFERENCE: 23902-08805
CURRENT APPLICATION NUMBER: US/09/739,466C
CURRENT FILING DATE: 2000-12-18
NUMBER OF SEQ ID NOS: 46

```

; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 46
; LENGTH: 31
; TYPE: PR
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (11)
; OTHER INFORMATION: aminocaproic acid
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (13)
; OTHER INFORMATION: aminocaproic acid
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (15)
; OTHER INFORMATION: aminocaproic acid
; US-09-739-466C-46

```

```

Query Match      100.0%; Score 48; DB 3; Length 31;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 YMLDLPET 9
         |||||
Db      1 YMLDLPET 9

```

Search completed: May 5, 2006, 07:55:16
Job time : 69.9 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 07:46:05 ; Search time 8.4 Seconds
(without alignments)
49.591 Million cell updates/sec

Title: US-08-170-344-14
Perfect score: 48
Sequence: 1 YMLDQPERT 9

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 235405 seqs, 46284737 residues
Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :

1: /SIDSS/ptodata/1/pubpaa/US08_NEW_PUB.pep1.*
2: /SIDSS/ptodata/1/pubpaa/US06_NEW_PUB.pep1.*
3: /SIDSS/ptodata/1/pubpaa/US07_NEW_PUB.pep1.*
4: /SIDSS/ptodata/1/pubpaa/US08_NEW_PUB.pep1.*
5: /SIDSS/ptodata/1/pubpaa/US09_NEW_PUB.pep1.*
6: /SIDSS/ptodata/1/pubpaa/US09_NEW_PUB.pep1.*
7: /SIDSS/ptodata/1/pubpaa/US10_NEW_PUB.pep1.*
8: /SIDSS/ptodata/1/pubpaa/US10_NEW_PUB.pep1.*
9: /SIDSS/ptodata/1/pubpaa/US11_NEW_PUB.pep1.*
10: /SIDSS/ptodata/1/pubpaa/US11_NEW_PUB.pep1.*
11: /SIDSS/ptodata/1/pubpaa/US60_NEW_PUB.pep1.*
12: /SIDSS/ptodata/1/pubpaa/US60_NEW_PUB.pep1.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	48	100.0	15	US-10-530-061-1711	Sequence 1711, Ap
2	48	100.0	98	US-10-511-814-8	Sequence 8, Appl
3	48	100.0	98	US-10-511-814-11	Sequence 11, Appl
4	48	100.0	98	US-10-530-253-14	Sequence 14, Appl
5	48	100.0	98	US-11-179-478-4	Sequence 4, Appl
6	48	100.0	248	US-10-530-253-1	Sequence 1, Appl
7	48	100.0	248	US-10-530-253-3	Sequence 3, Appl
8	48	100.0	248	US-10-530-253-5	Sequence 5, Appl
9	48	100.0	248	US-10-530-253-7	Sequence 7, Appl
10	48	100.0	248	US-10-530-253-9	Sequence 9, Appl
11	48	100.0	248	US-10-530-253-11	Sequence 11, Appl
12	48	100.0	256	US-11-192-823-2	Sequence 2, Appl
13	44	91.7	15	US-10-530-061-1731	Sequence 1731, Ap
14	44	91.7	99	US-10-530-253-34	Sequence 34, Appl
15	41	85.4	15	US-10-530-061-1749	Sequence 1749, Ap
16	39	81.2	15	US-10-530-061-1720	Sequence 1720, Ap
17	39	81.2	98	US-10-530-253-28	Sequence 28, Appl
18	36	75.0	99	US-10-530-253-50	Sequence 30, Appl
19	35	72.9	395	US-10-467-657-1266	Sequence 5266, Ap
20	34	70.8	15	US-10-530-061-1745	Sequence 1745, Ap
21	34	70.8	15	US-10-530-061-1751	Sequence 1751, Ap

22	70.8	98	9	US-10-530-253-36	Sequence 36, Appl
23	70.8	324	11	US-11-188-298-1960	Sequence 3960, Ap
24	70.8	646	11	US-11-087-099-10725	Sequence 10725, A
25	70.8	646	11	US-11-188-298-9913	Sequence 9913, Ap
26	70.8	698	11	US-11-087-099-8952	Sequence 8952, Ap
27	70.8	698	11	US-11-087-099-9341	Sequence 9341, Ap
28	70.8	698	11	US-11-188-298-8685	Sequence 8685, Ap
29	70.8	698	11	US-11-188-298-19289	Sequence 19289, A
30	70.8	896	11	US-11-218-020-15	Sequence 15, Appl
31	70.8	1039	8	US-10-511-937-2429	Sequence 2429, Ap
32	68.8	15	9	US-10-530-061-1724	Sequence 1724, Ap
33	68.8	97	9	US-10-530-253-29	Sequence 29, Appl
34	68.8	257	11	US-11-188-298-18028	Sequence 18028, A
35	68.8	384	11	US-11-072-512-2534	Sequence 2534, A
36	68.8	398	11	US-11-188-298-18665	Sequence 18665, A
37	68.8	486	11	US-11-188-298-286	Sequence 286, App
38	68.8	510	11	US-11-087-099-4252	Sequence 4252, Ap
39	68.8	510	11	US-11-188-298-14373	Sequence 14373, A
40	68.8	512	11	US-11-087-099-6798	Sequence 6798, Ap
41	68.8	552	9	US-10-131-826A-332	Sequence 332, App
42	68.8	552	9	US-10-973-115B-332	Sequence 332, App
43	68.8	552	9	US-10-137-873A-332	Sequence 332, App
44	68.8	552	9	US-10-152-370-332	Sequence 332, App
45	68.8	552	11	US-11-290-153-332	Sequence 332, App
46	68.8	935	9	US-10-995-561-1012	Sequence 1012, Ap
47	68.8	935	9	US-10-995-561-1013	Sequence 1013, Ap
48	68.8	1963	9	US-10-877-346-43	Sequence 43, Appl
49	68.8	276	11	US-11-045-004-1264	Sequence 1264, Ap
50	66.7	291	11	US-11-045-004-391	Sequence 391, App
51	66.7	305	11	US-11-080-091-13	Sequence 13, Appl
52	66.7	305	11	US-11-087-177-11	Sequence 11, Appl
53	66.7	305	11	US-11-087-177-13	Sequence 13, Appl
54	66.7	365	9	US-10-763-712A-81	Sequence 81, Appl
55	66.7	387	11	US-11-188-298-6836	Sequence 6836, Ap
56	66.7	548	9	US-10-493-909-77	Sequence 77, Appl
57	66.7	548	9	US-10-493-909-78	Sequence 78, Appl
58	66.7	770	8	US-10-505-928-361	Sequence 361, Appl
59	66.7	982	8	US-10-511-937-2411	Sequence 2411, Ap
60	64.6	135	11	US-11-096-568A-26530	Sequence 26530, A
61	64.6	176	11	US-11-096-568A-26529	Sequence 26529, A
62	64.6	191	11	US-11-096-568A-26528	Sequence 26528, A
63	64.6	253	11	US-11-087-099-11582	Sequence 11582, A
64	64.6	280	9	US-10-242-586-92	Sequence 92, Appl
65	64.6	280	9	US-10-242-586-92	Sequence 92, Appl
66	64.6	280	9	US-10-243-116-92	Sequence 92, Appl
67	64.6	280	9	US-10-243-136-92	Sequence 92, Appl
68	64.6	280	9	US-10-243-189-92	Sequence 92, Appl
69	64.6	280	9	US-10-243-215-92	Sequence 92, Appl
70	64.6	280	9	US-10-243-236-92	Sequence 92, Appl
71	64.6	280	9	US-10-243-298-92	Sequence 92, Appl
72	64.6	280	9	US-10-243-304-92	Sequence 92, Appl
73	64.6	280	9	US-10-243-338-92	Sequence 92, Appl
74	64.6	280	9	US-10-243-345-92	Sequence 92, Appl
75	64.6	280	9	US-10-243-357-92	Sequence 92, Appl
76	64.6	280	9	US-10-243-357-92	Sequence 92, Appl
77	64.6	280	9	US-10-247-015-92	Sequence 92, Appl
78	64.6	316	11	US-11-096-568A-18811	Sequence 18811, A
79	64.6	319	11	US-11-087-099-2481	Sequence 2481, Ap
80	64.6	337	11	US-11-188-298-7979	Sequence 7979, Ap
81	64.6	374	11	US-11-096-568A-18810	Sequence 18810, A
82	64.6	374	11	US-11-188-298-6859	Sequence 6859, Ap
83	64.6	430	11	US-11-096-568A-18809	Sequence 18809, A
84	64.6	430	11	US-11-045-004-2683	Sequence 2683, Ap
85	64.6	1966	9	US-10-877-346-13	Sequence 13, Appl
86	64.6	3433	11	US-10-714-781A-67	Sequence 67, Appl
87	64.6	3433	11	US-11-223-729-2	Sequence 2, Appl
88	62.5	141	11	US-11-119-098-1	Sequence 1, Appl
89	62.5	336	11	US-11-188-298-6516	Sequence 6516, Ap
90	62.5	336	11	US-11-188-298-13233	Sequence 13233, A
91	62.5	339	11	US-11-188-298-14926	Sequence 14926, A
92	62.5	359	11	US-11-188-298-14633	Sequence 14633, A
93	62.5	361	11	US-11-188-298-2340	Sequence 2340, Ap
94	62.5	369	11	US-11-074-176-324	Sequence 324, App

95	62.5	406	11	US-11-074-176-92	Sequence 92, Appl	166	29	60.4	2304	9	US-10-330-773-310	Sequence 310, App
96	62.5	412	11	US-11-188-298-1672	Sequence 1672, A	169	29	60.4	2764	9	US-10-995-561-691	Sequence 691, App
97	62.5	423	11	US-11-035-822-258	Sequence 258, App	170	29	60.4	2813	9	US-10-995-561-668	Sequence 668, App
98	62.5	467	11	US-11-219-995-7	Sequence 7, Appl	171	29	60.4	2919	9	US-10-821-234-1133	Sequence 1133, App
99	62.5	468	11	US-11-055-822-66	Sequence 68, Appl	172	29	58.3	17	9	US-10-895-064-2899	Sequence 2899, App
100	62.5	468	11	US-11-239-674-66	Sequence 66, Appl	173	28	58.3	17	11	US-11-129-741-2899	Sequence 2899, App
101	62.5	477	11	US-11-188-298-15141	Sequence 15141, A	174	28	58.3	156	11	US-11-045-004-2177	Sequence 2177, App
102	62.5	477	11	US-11-188-298-6826	Sequence 6826, App	175	28	58.3	157	11	US-11-096-568A-19338	Sequence 19338
103	62.5	479	11	US-11-188-298-9763	Sequence 9763, App	176	28	58.3	198	11	US-11-255-547-2	Sequence 2, Appl
104	62.5	479	11	US-11-188-298-15211	Sequence 15211, A	177	28	58.3	211	9	US-10-454-437-242	Sequence 242, App
105	62.5	479	11	US-11-188-298-21037	Sequence 21037, A	178	28	58.3	213	11	US-11-096-568A-19537	Sequence 19537, A
106	62.5	483	11	US-11-188-298-12703	Sequence 12703, A	179	28	58.3	236	9	US-10-510-386-116	Sequence 116, App
107	62.5	513	9	US-10-979-095-2	Sequence 2, Appl	180	28	58.3	232	11	US-11-054-281-118	Sequence 118, App
108	62.5	612	11	US-11-098-686-10678	Sequence 10678, A	181	28	58.3	237	11	US-11-144-247-494	Sequence 494, App
109	62.5	618	11	US-11-072-512-3605	Sequence 3605, App	182	28	58.3	235	11	US-11-096-568A-19936	Sequence 19936, A
110	62.5	660	11	US-11-186-284-125	Sequence 125, App	183	28	58.3	264	11	US-11-188-298-17110	Sequence 17110, A
111	62.5	673	9	US-10-784-004-394	Sequence 394, App	184	28	58.3	267	9	US-10-507-720-41	Sequence 41, Appl
112	62.5	673	9	US-10-784-004-937	Sequence 937, App	185	28	58.3	271	11	US-11-096-568A-19609	Sequence 19009, A
113	62.5	676	9	US-10-784-004-716	Sequence 716, App	186	28	58.3	272	11	US-11-096-568A-31650	Sequence 31650, A
114	62.5	676	9	US-10-784-004-1084	Sequence 1084, App	187	28	58.3	279	11	US-11-096-568A-31649	Sequence 31649, A
115	62.5	708	9	US-10-821-234-917	Sequence 917, App	188	28	58.3	305	9	US-10-502-972-4	Sequence 4, Appl
116	62.5	780	11	US-11-045-004-102	Sequence 102, App	189	28	58.3	308	11	US-11-172-740-1241	Sequence 1241, App
117	62.5	805	9	US-10-927-641-77	Sequence 77, Appl	190	28	58.3	312	11	US-11-054-281-32	Sequence 32, Appl
118	62.5	864	11	US-11-194-246-343	Sequence 343, App	191	28	58.3	312	11	US-11-054-281-320	Sequence 330, App
119	62.5	937	11	US-11-079-463-7544	Sequence 7544, App	192	28	58.3	312	11	US-11-054-281-324	Sequence 324, App
120	62.5	956	11	US-11-016-706-4039	Sequence 40, Appl	193	28	58.3	312	11	US-11-072-512-2882	Sequence 2882, App
121	62.5	1072	11	US-11-079-463-8439	Sequence 8439, App	194	28	58.3	322	11	US-11-188-298-19156	Sequence 19156, A
122	62.5	1072	11	US-11-019-711-47	Sequence 47, Appl	195	28	58.3	347	9	US-10-821-234-1136	Sequence 1136, App
123	62.5	154	9	US-10-506-454-1564	Sequence 1564, App	196	28	58.3	347	11	US-11-172-740-433	Sequence 433, App
124	60.4	155	9	US-11-096-568A-14922	Sequence 14922, A	197	28	58.3	350	11	US-11-188-298-17316	Sequence 17316, A
125	60.4	178	9	US-10-485-517-231	Sequence 231, App	198	28	58.3	356	9	US-10-506-454-769	Sequence 769, App
126	60.4	193	11	US-11-096-568A-14921	Sequence 14921, A	199	28	58.3	358	11	US-11-188-298-17577	Sequence 17577, A
127	60.4	243	11	US-11-045-004-797	Sequence 797, App	200	28	58.3	360	11	US-11-096-568A-30342	Sequence 30342, A
128	60.4	258	11	US-11-096-568A-14920	Sequence 14920, A	201	28	58.3	362	11	US-11-087-099-93064	Sequence 3064, App
129	60.4	336	11	US-11-188-298-10146	Sequence 10146, A	202	28	58.3	362	11	US-11-096-568A-19008	Sequence 19008, A
130	60.4	337	11	US-11-172-740-432	Sequence 432, App	203	28	58.3	362	11	US-11-188-298-12898	Sequence 12898, App
131	60.4	348	11	US-11-045-004-2586	Sequence 2586, App	204	28	58.3	363	11	US-11-054-281-120	Sequence 120, App
132	60.4	354	11	US-11-188-298-666	Sequence 666, App	205	28	58.3	377	8	US-10-511-937-7624	Sequence 2634, App
133	60.4	397	11	US-11-087-099-4612	Sequence 4612, App	206	28	58.3	379	11	US-11-096-568A-30341	Sequence 30341, A
134	60.4	397	11	US-11-087-099-7096	Sequence 7096, App	207	28	58.3	383	11	US-11-096-568A-24799	Sequence 24799, A
135	60.4	399	11	US-11-188-298-5973	Sequence 5973, App	208	28	58.3	386	11	US-11-096-568A-31648	Sequence 31648, A
136	60.4	400	11	US-11-079-463-5896	Sequence 5896, App	209	28	58.3	388	11	US-11-130-821-1	Sequence 1, Appl
137	60.4	407	11	US-11-098-686-10169	Sequence 10169, A	210	28	58.3	411	11	US-11-188-298-9354	Sequence 9354, App
138	60.4	412	11	US-11-087-099-3547	Sequence 3547, App	211	28	58.3	416	9	US-10-467-657-5284	Sequence 5284, App
139	60.4	425	8	US-10-503-928-594	Sequence 594, App	212	28	58.3	433	11	US-11-096-568A-24798	Sequence 24798, A
140	60.4	425	11	US-11-219-995-8	Sequence 8, Appl	213	28	58.3	442	11	US-11-096-568A-24797	Sequence 24797, A
141	60.4	425	11	US-11-072-175-198	Sequence 198, Appl	214	28	58.3	459	11	US-11-087-099-6435	Sequence 6435, App
142	60.4	425	11	US-11-299-122-2	Sequence 2, Appl	215	28	58.3	459	11	US-11-188-298-15867	Sequence 15867, App
143	60.4	427	11	US-11-087-099-3254	Sequence 3254, App	216	28	58.3	461	11	US-11-188-298-1428	Sequence 1428, App
144	60.4	427	11	US-11-087-099-12304	Sequence 12304, A	217	28	58.3	467	11	US-11-096-568A-30340	Sequence 30340, A
145	60.4	427	11	US-11-188-298-2192	Sequence 2192, App	218	28	58.3	470	11	US-11-188-298-8584	Sequence 8584, App
146	60.4	427	11	US-11-188-298-11309	Sequence 11309, A	219	28	58.3	470	11	US-11-188-298-12041	Sequence 12041, A
147	60.4	441	11	US-11-087-099-2892	Sequence 2892, App	220	28	58.3	473	11	US-11-188-298-15314	Sequence 15314, A
148	60.4	441	11	US-11-188-298-13775	Sequence 13775, A	221	28	58.3	473	11	US-11-087-099-8865	Sequence 8865, App
149	60.4	461	11	US-11-072-512-2367	Sequence 2367, App	222	28	58.3	485	11	US-11-096-568A-7992	Sequence 7992, App
150	60.4	482	11	US-11-188-298-21869	Sequence 21869, A	223	28	58.3	486	11	US-11-188-298-7991	Sequence 7991, App
151	60.4	512	11	US-11-087-099-3997	Sequence 3997, App	224	28	58.3	486	11	US-11-188-298-22007	Sequence 22007, A
152	60.4	521	11	US-11-188-298-15849	Sequence 15849, A	225	28	58.3	498	11	US-11-096-568A-7990	Sequence 7901, App
153	60.4	529	11	US-11-079-463-9892	Sequence 9892, App	226	28	58.3	500	11	US-11-096-568A-12348	Sequence 7900, App
154	60.4	620	11	US-11-072-512-2045	Sequence 2045, App	227	28	58.3	504	11	US-11-087-099-9816	Sequence 9816, App
155	60.4	632	11	US-11-045-004-506	Sequence 506, App	228	28	58.3	504	11	US-11-087-099-12331	Sequence 12331, A
156	60.4	665	11	US-11-188-298-7401	Sequence 7401, App	229	28	58.3	511	11	US-11-087-099-5928	Sequence 5928, App
157	60.4	723	11	US-11-188-298-16346	Sequence 16346, A	230	28	58.3	514	11	US-11-087-099-3612	Sequence 3612, App
158	60.4	724	11	US-11-079-463-10168	Sequence 10168, A	231	28	58.3	514	11	US-11-087-099-11500	Sequence 11500, A
159	60.4	798	9	US-10-467-657-2376	Sequence 2376, App	232	28	58.3	552	11	US-11-188-298-12348	Sequence 12348, A
160	60.4	857	11	US-11-188-298-2723	Sequence 2723, App	233	28	58.3	552	11	US-11-188-298-12348	Sequence 22348, A
161	60.4	866	11	US-11-188-298-5746	Sequence 5746, App	234	28	58.3	558	11	US-11-188-298-11428	Sequence 11947, A
162	60.4	919	10	US-11-302-678-62	Sequence 62, Appl	235	28	58.3	558	11	US-11-188-298-14218	Sequence 14218, A
163	60.4	973	11	US-11-087-099-4325	Sequence 4325, App	236	28	58.3	654	11	US-11-079-463-9792	Sequence 9792, App
164	60.4	1075	9	US-10-745-586-197	Sequence 197, App	237	28	58.3	721	11	US-11-262-356-12	Sequence 12, Appl
165	60.4	1134	11	US-11-087-099-1744	Sequence 1744, App	238	28	58.3	778	11	US-11-188-298-8840	Sequence 8840, App
166	60.4	1140	11	US-11-087-099-11073	Sequence 11073, A	239	28	58.3	847	9	US-10-242-586-94	Sequence 94, Appl
167	60.4	1924	8	US-10-512-386-56	Sequence 56, Appl	240	28	58.3	847	9	US-10-242-992-94	Sequence 94, Appl

241	28	58.3	847	9	US-10-243-116-94	Sequence 94, Appl	314	27	56.2	294	11	US-11-096-568A-26792	Sequence 26792, A
242	28	58.3	847	9	US-10-243-136-94	Sequence 94, Appl	315	27	56.2	295	11	US-11-172-740-1240	Sequence 1240, Ap
243	28	58.3	847	9	US-10-243-189-94	Sequence 94, Appl	316	27	56.2	299	11	US-11-172-740-1239	Sequence 1239, Ap
244	28	58.3	847	9	US-10-243-215-94	Sequence 94, Appl	317	27	56.2	302	11	US-11-096-568A-25134	Sequence 25134, A
245	28	58.3	847	9	US-10-243-236-94	Sequence 94, Appl	318	27	56.2	304	11	US-11-096-568A-26791	Sequence 26791, A
246	28	58.3	847	9	US-10-243-298-94	Sequence 94, Appl	319	27	56.2	304	11	US-11-096-568A-33504	Sequence 33504, A
247	28	58.3	847	9	US-10-243-304-94	Sequence 94, Appl	320	27	56.2	304	11	US-11-172-740-1236	Sequence 1236, Ap
248	28	58.3	847	9	US-10-243-338-94	Sequence 94, Appl	321	27	56.2	314	11	US-11-087-099-5287	Sequence 5287, Ap
249	28	58.3	847	9	US-10-243-345-94	Sequence 94, Appl	322	27	56.2	314	11	US-11-087-099-5913	Sequence 5913, Ap
250	28	58.3	847	9	US-10-243-357-94	Sequence 94, Appl	323	27	56.2	315	11	US-10-506-454-1518	Sequence 1518, Ap
251	28	58.3	847	9	US-10-245-083-94	Sequence 94, Appl	324	27	56.2	319	11	US-11-096-568A-25133	Sequence 25133, A
252	28	58.3	847	9	US-10-247-015-94	Sequence 94, Appl	325	27	56.2	320	11	US-11-096-568A-10017	Sequence 10017, A
253	28	58.3	850	11	US-11-188-298-5993	Sequence 5993, Ap	326	27	56.2	324	9	US-11-096-568A-25533	Sequence 25533, A
254	28	58.3	856	11	US-11-054-281-116	Sequence 116, App	327	27	56.2	329	9	US-11-156-084-293	Sequence 1460, Ap
255	28	58.3	878	11	US-11-188-298-6160	Sequence 6160, Ap	328	27	56.2	332	11	US-11-188-298-1683	Sequence 1683, Ap
256	28	58.3	939	11	US-11-188-298-10003	Sequence 10003, A	329	27	56.2	332	11	US-11-188-298-1683	Sequence 1683, Ap
257	28	58.3	943	11	US-11-079-463-9910	Sequence 9310, Ap	330	27	56.2	332	11	US-11-188-298-13440	Sequence 13440, A
258	28	58.3	1032	11	US-11-014-367-3	Sequence 3, Appl1	331	27	56.2	333	9	US-10-137-873A-1332	Sequence 1332, App
259	28	58.3	1032	11	US-11-087-099-1095	Sequence 1095, Ap	332	27	56.2	333	9	US-10-973-115B-132	Sequence 132, App
260	28	58.3	1126	11	US-11-087-099-2533	Sequence 2533, Ap	333	27	56.2	333	9	US-10-137-873A-1332	Sequence 132, App
261	28	58.3	1130	11	US-11-087-099-6723	Sequence 6723, Ap	334	27	56.2	333	9	US-10-137-873A-1332	Sequence 132, App
262	28	58.3	1196	11	US-11-072-512-2933	Sequence 2933, Ap	335	27	56.2	333	9	US-10-137-873A-1332	Sequence 132, App
263	28	58.3	1210	11	US-11-113-202-6	Sequence 6, Appl1	336	27	56.2	336	11	US-11-096-568A-29004	Sequence 29004, A
264	28	58.3	1210	11	US-11-145-566-1	Sequence 1, Appl1	337	27	56.2	336	11	US-11-096-568A-25532	Sequence 25532, A
265	28	58.3	1294	11	US-11-188-298-9622	Sequence 9622, Ap	338	27	56.2	336	11	US-11-188-298-17125	Sequence 17125, A
266	28	58.3	1342	11	US-11-188-298-10811	Sequence 10811, A	339	27	56.2	338	11	US-11-188-298-17125	Sequence 17125, A
267	28	58.3	1367	9	US-10-510-903-10	Sequence 510, Appl	340	27	56.2	343	11	US-11-172-740-336	Sequence 436, App
268	28	58.3	1367	9	US-10-510-903-10	Sequence 510, Appl	341	27	56.2	344	11	US-11-188-298-17125	Sequence 17125, A
269	28	58.3	1367	11	US-11-113-202-18	Sequence 18, Appl	342	27	56.2	344	11	US-11-188-298-17125	Sequence 17125, A
270	28	58.3	1368	9	US-10-995-561-539	Sequence 539, Appl	343	27	56.2	344	11	US-11-188-298-17125	Sequence 17125, A
271	28	58.3	1368	11	US-11-186-284-26	Sequence 26, Appl	344	27	56.2	345	11	US-11-188-298-17125	Sequence 17125, A
272	27	56.2	17	9	US-10-519-122-76	Sequence 76, Appl	345	27	56.2	345	11	US-11-096-568A-29003	Sequence 29003, A
273	27	56.2	64	11	US-11-188-298-20871	Sequence 20871, A	346	27	56.2	353	11	US-11-096-568A-29003	Sequence 29003, A
274	27	56.2	92	9	US-10-485-788A-786	Sequence 786, App	347	27	56.2	371	11	US-11-188-298-8260	Sequence 8260, Ap
275	27	56.2	92	11	US-11-053-076-168	Sequence 168, App	348	27	56.2	374	11	US-11-087-099-1572	Sequence 1572, Ap
276	27	56.2	97	9	US-10-475-075-306	Sequence 306, App	349	27	56.2	379	11	US-11-096-568A-29822	Sequence 29822, A
277	27	56.2	97	9	US-10-475-075-306	Sequence 306, App	350	27	56.2	380	11	US-11-087-099-1795	Sequence 1795, Ap
278	27	56.2	105	11	US-11-155-775-147	Sequence 12, Appl	351	27	56.2	381	11	US-11-096-568A-29002	Sequence 29002, A
279	27	56.2	122	11	US-11-045-004-1112	Sequence 11, Appl	352	27	56.2	388	11	US-11-188-298-8377	Sequence 8377, Ap
280	27	56.2	123	11	US-11-132-947-10	Sequence 10, Appl	353	27	56.2	389	11	US-11-045-004-1248	Sequence 1248, Ap
281	27	56.2	127	11	US-11-193-512-92	Sequence 92, Appl	354	27	56.2	393	11	US-11-188-298-16789	Sequence 16789, A
282	27	56.2	127	11	US-11-193-512-98	Sequence 98, Appl	355	27	56.2	393	11	US-11-052-554A-79	Sequence 79, Appl
283	27	56.2	127	11	US-11-193-512-103	Sequence 103, App	356	27	56.2	395	11	US-11-172-740-435	Sequence 435, App
284	27	56.2	132	9	US-10-511-130-30	Sequence 30, Appl	357	27	56.2	397	11	US-11-172-740-434	Sequence 434, App
285	27	56.2	134	11	US-11-169-041-226	Sequence 226, App	358	27	56.2	398	11	US-11-046-668-9	Sequence 9, Appl1
286	27	56.2	134	11	US-11-045-004-2476	Sequence 2476, App	359	27	56.2	402	11	US-11-188-298-18172	Sequence 18172, A
287	27	56.2	152	11	US-11-096-568A-16341	Sequence 16341, A	360	27	56.2	402	11	US-11-188-298-19148	Sequence 19148, A
288	27	56.2	152	11	US-11-132-947-12	Sequence 12, Appl	361	27	56.2	402	11	US-11-188-298-19148	Sequence 19148, A
289	27	56.2	161	11	US-11-096-568A-10019	Sequence 10019, A	362	27	56.2	405	11	US-11-188-298-11243	Sequence 11243, A
290	27	56.2	161	11	US-11-172-740-1237	Sequence 1237, Ap	363	27	56.2	412	9	US-10-858-730-82	Sequence 82, Appl
291	27	56.2	162	11	US-11-096-568A-16340	Sequence 16340, A	364	27	56.2	414	11	US-11-096-568A-12745	Sequence 12745, A
292	27	56.2	172	11	US-11-079-463-7030	Sequence 7030, Ap	365	27	56.2	414	11	US-11-188-298-11713	Sequence 11713, A
293	27	56.2	172	11	US-11-188-298-3879	Sequence 3879, Ap	366	27	56.2	414	11	US-11-188-298-11713	Sequence 11713, A
294	27	56.2	192	11	US-11-072-512-2762	Sequence 2762, Ap	367	27	56.2	415	11	US-11-052-882-816	Sequence 816, App
295	27	56.2	193	11	US-11-072-512-2762	Sequence 2762, Ap	368	27	56.2	415	11	US-11-052-882-816	Sequence 816, App
296	27	56.2	200	9	US-10-793-626-2326	Sequence 2326, Ap	369	27	56.2	427	11	US-11-188-298-14337	Sequence 14337, A
297	27	56.2	206	11	US-11-096-568A-16339	Sequence 16339, A	370	27	56.2	431	11	US-11-188-298-3818	Sequence 3818, Ap
298	27	56.2	211	11	US-11-188-298-21549	Sequence 21549, A	371	27	56.2	431	11	US-11-188-298-20784	Sequence 20784, A
299	27	56.2	216	11	US-11-045-004-449	Sequence 449, App	372	27	56.2	442	11	US-11-052-882-814	Sequence 814, App
300	27	56.2	235	9	US-10-453-372-406	Sequence 406, App	373	27	56.2	446	11	US-11-188-298-12080	Sequence 12080, A
301	27	56.2	235	9	US-10-453-372-408	Sequence 408, App	374	27	56.2	466	11	US-11-188-298-13664	Sequence 13664, A
302	27	56.2	236	11	US-11-096-568A-25135	Sequence 25135, A	375	27	56.2	467	11	US-11-188-298-19675	Sequence 19675, A
303	27	56.2	239	9	US-10-453-372-400	Sequence 400, App	376	27	56.2	479	11	US-11-087-099-11307	Sequence 9759, Ap
304	27	56.2	239	9	US-10-453-372-402	Sequence 402, App	377	27	56.2	485	11	US-11-188-298-9759	Sequence 9759, Ap
305	27	56.2	239	9	US-10-453-372-404	Sequence 404, App	378	27	56.2	486	11	US-11-024-959-279	Sequence 279, App
306	27	56.2	248	11	US-11-096-568A-10018	Sequence 10018, A	379	27	56.2	491	9	US-10-506-454-338	Sequence 338, App
307	27	56.2	248	9	US-10-455-772-216	Sequence 216, App	380	27	56.2	494	11	US-11-188-298-1445	Sequence 1445, Ap
308	27	56.2	269	11	US-11-096-568A-29824	Sequence 29824, A	381	27	56.2	500	9	US-10-524-647-20	Sequence 20, Appl1
309	27	56.2	287	11	US-11-092-168-5	Sequence 5, Appl1	382	27	56.2	500	9	US-10-524-973-20	Sequence 20, Appl1
310	27	56.2	288	11	US-11-096-568A-133505	Sequence 133505, A	383	27	56.2	500	9	US-10-541-513-8	Sequence 8, Appl1
311	27	56.2	293	11	US-11-096-568A-10770	Sequence 10770, A	384	27	56.2	501	11	US-11-087-099-5997	Sequence 5997, Ap
312	27	56.2	293	11	US-11-096-568A-26793	Sequence 26793, A	385	27	56.2	501	11	US-11-087-099-8133	Sequence 8133, Ap
313	27	56.2	293	11	US-11-172-740-1238	Sequence 1238, Ap	386	27	56.2	501	11	US-11-087-099-8133	Sequence 8133, Ap

387	27	56.2	501	11	US-11-087-099-9295	Sequence 9295, Ap	460	27	56.2	1121	11	US-11-087-099-10482	Sequence 10482, A
388	27	56.2	502	11	US-11-087-099-10000	Sequence 10000, A	461	27	56.2	1139	11	US-11-096-5688-27582	Sequence 27582, A
389	27	56.2	503	11	US-11-087-099-9082	Sequence 9082, Ap	462	27	56.2	1216	11	US-10-873-5288-12	Sequence 12, Appl1
390	27	56.2	510	11	US-11-045-004-1519	Sequence 1519, Ap	463	27	56.2	1224	11	US-11-096-5688-27581	Sequence 27581, A
391	27	56.2	511	11	US-11-055-822-698	Sequence 698, App	464	27	56.2	1240	11	US-11-096-5688-27580	Sequence 27580, A
392	27	56.2	513	11	US-11-087-099-7631	Sequence 7631, App	465	27	56.2	1282	9	US-10-510-9411-18	Sequence 18, Appl1
393	27	56.2	513	11	US-11-087-099-11726	Sequence 11726, A	466	27	56.2	1287	11	US-11-037-243-72	Sequence 72, Appl1
394	27	56.2	516	11	US-11-216-267-36	Sequence 36, Appl1	467	27	56.2	1341	11	US-11-188-298-21361	Sequence 21361, A
395	27	56.2	516	11	US-11-223-382-36	Sequence 36, Appl1	468	27	56.2	1649	9	US-10-995-561-974	Sequence 974, App
396	27	56.2	521	9	US-10-455-772-212	Sequence 1212, App	469	27	56.2	1694	11	US-11-135-855-36	Sequence 36, Appl1
397	27	56.2	533	11	US-11-214-199-63	Sequence 63, Appl1	470	27	56.2	1700	9	US-10-453-372-998	Sequence 398, App
398	27	56.2	537	11	US-11-087-099-2165	Sequence 2165, Ap	471	27	56.2	1700	9	US-10-453-372-112	Sequence 412, App
399	27	56.2	537	11	US-11-201-916-25	Sequence 25, Appl1	472	27	56.2	1700	9	US-10-453-372-114	Sequence 414, App
400	27	56.2	590	9	US-10-330-773-124	Sequence 124, App	473	27	56.2	1700	9	US-10-453-372-116	Sequence 416, App
401	27	56.2	590	9	US-10-330-773-121	Sequence 121, App	474	27	56.2	1700	9	US-10-453-372-418	Sequence 418, App
402	27	56.2	595	9	US-10-455-772-214	Sequence 124, App	475	27	56.2	1709	9	US-10-995-561-973	Sequence 973, App
403	27	56.2	595	9	US-10-455-772-224	Sequence 224, App	476	27	56.2	1709	9	US-10-453-372-410	Sequence 410, App
404	27	56.2	595	9	US-10-455-772-226	Sequence 226, App	477	27	56.2	1709	11	US-11-135-855-35	Sequence 35, Appl1
405	27	56.2	595	9	US-10-455-772-228	Sequence 228, App	478	27	56.2	1733	11	US-11-182-016-21	Sequence 21, Appl1
406	27	56.2	595	9	US-10-455-772-230	Sequence 230, App	479	27	56.2	1766	11	US-11-075-185-10	Sequence 10, Appl1
407	27	56.2	595	9	US-10-455-772-232	Sequence 232, App	480	27	56.2	1849	9	US-10-506-454-1148	Sequence 1148, App
408	27	56.2	595	9	US-10-455-772-234	Sequence 234, App	481	27	56.2	1897	9	US-10-821-234-1635	Sequence 1635, Ap
409	27	56.2	595	9	US-10-455-772-236	Sequence 236, App	482	27	56.2	1907	11	US-11-000-4673-250	Sequence 250, App
410	27	56.2	595	9	US-10-455-772-238	Sequence 238, App	483	27	56.2	3969	9	US-10-974-1274-59	Sequence 59, Appl1
411	27	56.2	595	9	US-10-455-772-240	Sequence 240, App	484	26	54.2	15	9	US-10-530-061-1750	Sequence 1750, App
412	27	56.2	595	9	US-10-455-772-242	Sequence 242, App	485	26	54.2	46	9	US-10-467-657-6682	Sequence 6682, Ap
413	27	56.2	596	9	US-10-455-772-220	Sequence 220, App	486	26	54.2	47	9	US-10-467-657-6694	Sequence 6694, Ap
414	27	56.2	596	9	US-10-455-772-222	Sequence 222, App	487	26	54.2	50	9	US-10-467-657-6698	Sequence 6698, Ap
415	27	56.2	604	9	US-10-455-772-218	Sequence 218, App	488	26	54.2	52	11	US-11-264-096-2241	Sequence 2241, Ap
416	27	56.2	622	11	US-11-188-298-15979	Sequence 15979, A	489	26	54.2	60	9	US-10-853-80784-50	Sequence 50, Appl1
417	27	56.2	624	11	US-11-079-463-7504	Sequence 7504, Ap	490	26	54.2	61	11	US-11-079-463-7072	Sequence 7072, Ap
418	27	56.2	624	11	US-11-087-099-8127	Sequence 8127, Ap	491	26	54.2	72	9	US-10-467-657-6668	Sequence 6668, Ap
419	27	56.2	645	11	US-11-188-298-18561	Sequence 18561, A	492	26	54.2	107	9	US-10-530-253-37	Sequence 37, Appl1
420	27	56.2	668	11	US-11-188-298-768	Sequence 768, App	493	26	54.2	111	9	US-10-485-7884-781	Sequence 781, App
421	27	56.2	682	11	US-11-072-512-2390	Sequence 2390, App	494	26	54.2	111	11	US-11-053-076-163	Sequence 163, App
422	27	56.2	706	11	US-11-188-298-11914	Sequence 11914, A	495	26	54.2	115	11	US-11-079-463-8332	Sequence 8392, Ap
423	27	56.2	743	9	US-10-915-002-194	Sequence 194, App	496	26	54.2	133	11	US-11-096-5688-11187	Sequence 1187, A
424	27	56.2	750	11	US-11-188-298-6350	Sequence 6350, App	497	26	54.2	143	9	US-10-506-454-428	Sequence 428, App
425	27	56.2	753	11	US-11-077-619-48	Sequence 48, Appl1	498	26	54.2	150	11	US-11-038-676-20	Sequence 20, Appl1
426	27	56.2	753	11	US-11-188-298-1188	Sequence 1188, App	499	26	54.2	153	9	US-10-506-454-388	Sequence 388, App
427	27	56.2	753	11	US-11-188-298-3250	Sequence 3250, App	500	26	54.2	158	11	US-11-038-676-30	Sequence 30, Appl1
428	27	56.2	753	11	US-11-188-298-3394	Sequence 3394, App	501	26	54.2	160	11	US-11-096-5688-28091	Sequence 28091, A
429	27	56.2	753	11	US-11-188-298-6275	Sequence 6275, App	502	26	54.2	166	11	US-11-188-298-15737	Sequence 15737, A
430	27	56.2	753	11	US-11-188-298-7931	Sequence 7931, App	503	26	54.2	167	11	US-11-235-198-38	Sequence 38, Appl1
431	27	56.2	753	11	US-11-188-298-9131	Sequence 9131, App	504	26	54.2	168	11	US-11-072-512-2638	Sequence 2698, App
432	27	56.2	753	11	US-11-188-298-10266	Sequence 10266, A	505	26	54.2	169	11	US-11-188-298-20585	Sequence 20585, A
433	27	56.2	753	11	US-11-188-298-10836	Sequence 10836, A	506	26	54.2	170	9	US-10-467-657-104	Sequence 104, App
434	27	56.2	753	11	US-11-188-298-11157	Sequence 11157, A	507	26	54.2	170	9	US-10-467-657-8078	Sequence 8078, App
435	27	56.2	753	11	US-11-188-298-15649	Sequence 15649, A	508	26	54.2	172	9	US-10-821-234-1338	Sequence 1338, App
436	27	56.2	753	11	US-11-188-298-15937	Sequence 15937, A	509	26	54.2	184	9	US-10-980-388-106	Sequence 106, App
437	27	56.2	753	11	US-11-188-298-16233	Sequence 16233, A	510	26	54.2	188	9	US-10-506-454-393	Sequence 393, App
438	27	56.2	753	11	US-11-188-298-18969	Sequence 18969, A	511	26	54.2	190	11	US-11-087-099-8048	Sequence 8048, App
439	27	56.2	753	11	US-11-188-298-19779	Sequence 19779, A	512	26	54.2	190	11	US-11-188-298-11087	Sequence 11087, A
440	27	56.2	753	11	US-11-188-298-20176	Sequence 20176, A	513	26	54.2	190	11	US-11-045-004-1494	Sequence 1494, Ap
441	27	56.2	753	11	US-11-188-298-20212	Sequence 20212, A	514	26	54.2	197	9	US-10-784-004-879	Sequence 379, App
442	27	56.2	753	11	US-11-188-298-22446	Sequence 22446, A	515	26	54.2	197	9	US-10-784-004-879	Sequence 379, App
443	27	56.2	753	11	US-11-098-886-11087	Sequence 11087, A	516	26	54.2	199	11	US-11-096-5688-3518	Sequence 3918, App
444	27	56.2	762	11	US-11-087-099-9342	Sequence 3342, App	517	26	54.2	201	9	US-10-878-5564-3	Sequence 3, Appl1
445	27	56.2	762	11	US-11-188-298-9131	Sequence 3131, App	518	26	54.2	204	11	US-11-096-5688-18486	Sequence 18486, A
446	27	56.2	766	9	US-10-821-234-1691	Sequence 1691, App	519	26	54.2	208	9	US-10-793-626-782	Sequence 782, App
447	27	56.2	775	9	US-10-516-099-2	Sequence 2, Appl1	520	26	54.2	210	11	US-11-087-099-12364	Sequence 12364, A
448	27	56.2	799	11	US-11-087-099-5737	Sequence 5737, App	521	26	54.2	215	9	US-10-821-234-1544	Sequence 1444, App
449	27	56.2	822	11	US-11-200-2968-67	Sequence 67, Appl1	522	26	54.2	228	11	US-11-096-5688-4389	Sequence 4389, App
450	27	56.2	848	11	US-11-096-5688-30056	Sequence 30056, A	523	26	54.2	228	11	US-11-079-463-5654	Sequence 5654, App
451	27	56.2	903	11	US-11-096-5688-30089	Sequence 30089, A	524	26	54.2	231	11	US-11-096-5688-17303	Sequence 17303, A
452	27	56.2	931	11	US-11-079-463-10285	Sequence 10285, A	525	26	54.2	232	11	US-11-052-554-186	Sequence 186, App
453	27	56.2	934	11	US-11-096-5688-30088	Sequence 30088, A	526	26	54.2	232	11	US-11-096-5688-28090	Sequence 28090, A
454	27	56.2	964	11	US-11-016-706-39	Sequence 39, Appl1	527	26	54.2	232	11	US-11-079-463-7919	Sequence 7919, App
455	27	56.2	991	11	US-11-096-5688-30055	Sequence 30055, A	528	26	54.2	236	11	US-11-096-5688-19065	Sequence 19065, A
456	27	56.2	994	11	US-11-096-5688-30054	Sequence 30054, A	529	26	54.2	238	9	US-10-793-626-20	Sequence 20, Appl1
457	27	56.2	995	11	US-11-096-5688-30087	Sequence 30087, A	530	26	54.2	241	11	US-11-096-5688-18485	Sequence 18485, A
458	27	56.2	1019	11	US-11-079-463-7842	Sequence 7842, App	531	26	54.2	244	11	US-11-096-5688-19010	Sequence 19010, A
459	27	56.2	1027	11	US-11-079-463-8899	Sequence 8899, App	532	26	54.2	247	11	US-11-096-5688-19064	Sequence 19064, A

533	26	54.2	251	9	US-10-485-788A-509	Sequence 509, App	606	26	54.2	396	9	US-10-921-793-6	Sequence 6, App1
534	26	54.2	259	9	US-10-131-826A-304	Sequence 304, App	607	26	54.2	396	9	US-10-501-035-204	Sequence 204, App
535	26	54.2	259	9	US-10-973-115B-304	Sequence 304, App	608	26	54.2	396	9	US-10-931-198-6	Sequence 6, App1
536	26	54.2	259	9	US-10-137-873A-304	Sequence 304, App	609	26	54.2	396	9	US-10-942-042-6	Sequence 6, App1
537	26	54.2	259	9	US-10-152-370-304	Sequence 304, App	610	26	54.2	396	11	US-11-051-568-5	Sequence 5, App1
538	26	54.2	259	11	US-11-390-153-304	Sequence 304, App	611	26	54.2	396	11	US-11-096-568A-17324	Sequence 17324, A
539	26	54.2	263	11	US-11-087-099-8618	Sequence 8618, Ap	612	26	54.2	396	11	US-11-185-033-2	Sequence 2, App1
540	26	54.2	263	11	US-11-096-568A-4388	Sequence 4388, Ap	613	26	54.2	396	11	US-11-185-033-5	Sequence 5, App1
541	26	54.2	265	11	US-11-096-568A-1177	Sequence 1177, Ap	614	26	54.2	396	11	US-11-185-033-7	Sequence 7, App1
542	26	54.2	269	9	US-10-784-004-1177	Sequence 805, App	615	26	54.2	399	11	US-11-096-568A-6786	Sequence 6786, App1
543	26	54.2	270	8	US-10-505-928-805	Sequence 805, App	616	26	54.2	400	11	US-11-096-568A-32007	Sequence 32007, A
544	26	54.2	270	9	US-10-467-657-5806	Sequence 5806, Ap	617	26	54.2	400	11	US-11-045-004-318	Sequence 318, App
545	26	54.2	270	9	US-10-506-454-1415	Sequence 1415, Ap	618	26	54.2	402	11	US-11-188-298-11564	Sequence 11564, A
546	26	54.2	272	11	US-10-784-004-1231	Sequence 1231, Ap	619	26	54.2	403	11	US-11-096-568A-32155	Sequence 32155, A
547	26	54.2	272	11	US-11-096-568A-6787	Sequence 6787, Ap	620	26	54.2	405	11	US-11-096-568A-32155	Sequence 13271, A
548	26	54.2	273	11	US-11-096-568A-10838	Sequence 10838, A	621	26	54.2	406	11	US-11-188-298-12371	Sequence 13271, A
549	26	54.2	276	9	US-10-485-517-424	Sequence 424, App	622	26	54.2	408	11	US-11-087-099-6310	Sequence 6310, Ap
550	26	54.2	276	11	US-11-096-568A-30981	Sequence 30981, A	623	26	54.2	410	11	US-11-188-298-9180	Sequence 9180, Ap
551	26	54.2	285	11	US-11-087-099-10484	Sequence 10484, A	624	26	54.2	410	11	US-11-188-298-11564	Sequence 11564, A
552	26	54.2	288	11	US-11-096-568A-31742	Sequence 31742, A	625	26	54.2	411	11	US-11-096-568A-32006	Sequence 32006, A
553	26	54.2	289	11	US-11-087-099-9566	Sequence 9566, Ap	626	26	54.2	412	11	US-11-096-568A-7800	Sequence 7800, Ap
554	26	54.2	293	9	US-10-967-671-14	Sequence 14, App1	627	26	54.2	415	9	US-10-467-657-7774	Sequence 7774, Ap
555	26	54.2	300	11	US-11-096-568A-19063	Sequence 19063, A	628	26	54.2	416	11	US-11-096-568A-28692	Sequence 28692, A
556	26	54.2	301	11	US-11-072-512-2223	Sequence 2223, Ap	629	26	54.2	417	11	US-11-188-298-19612	Sequence 19612, A
557	26	54.2	301	11	US-11-096-568A-33674	Sequence 33674, A	630	26	54.2	422	9	US-10-632-150-4	Sequence 4, App1
558	26	54.2	302	11	US-11-045-004-1615	Sequence 1615, A	631	26	54.2	422	10	US-11-106-014-4	Sequence 4, App1
559	26	54.2	308	11	US-11-098-086-10548	Sequence 10548, A	632	26	54.2	422	11	US-11-073-457-4	Sequence 4, App1
560	26	54.2	309	11	US-11-096-568A-33673	Sequence 33673, A	633	26	54.2	422	11	US-11-073-460-4	Sequence 4, App1
561	26	54.2	314	11	US-11-229-769-239	Sequence 239, App	634	26	54.2	428	11	US-11-087-099-12241	Sequence 12341, A
562	26	54.2	314	11	US-11-229-769-355	Sequence 355, App	635	26	54.2	432	11	US-11-079-463-7342	Sequence 7342, Ap
563	26	54.2	318	11	US-11-096-568A-4387	Sequence 4387, Ap	636	26	54.2	440	9	US-10-194-487-34	Sequence 34, App1
564	26	54.2	320	11	US-11-087-099-9806	Sequence 9806, Ap	637	26	54.2	440	9	US-10-195-883-34	Sequence 34, App1
565	26	54.2	320	11	US-11-188-298-5968	Sequence 5968, Ap	638	26	54.2	440	9	US-10-195-888-34	Sequence 34, App1
566	26	54.2	323	11	US-11-188-298-15128	Sequence 15128, A	639	26	54.2	440	9	US-10-195-889-34	Sequence 34, App1
567	26	54.2	324	11	US-11-096-568A-18484	Sequence 18484, A	640	26	54.2	442	11	US-11-096-568A-32154	Sequence 32154, A
568	26	54.2	329	11	US-11-087-099-1244	Sequence 1244, Ap	641	26	54.2	442	11	US-11-172-740-459	Sequence 459, App
569	26	54.2	333	11	US-11-188-298-2233	Sequence 2233, Ap	642	26	54.2	442	11	US-11-172-740-457	Sequence 706, App
570	26	54.2	334	11	US-11-165-211-53	Sequence 53, App1	643	26	54.2	444	11	US-11-172-740-457	Sequence 457, App
571	26	54.2	335	11	US-11-165-226-63	Sequence 63, App1	644	26	54.2	444	11	US-11-172-740-461	Sequence 461, App
572	26	54.2	335	11	US-11-188-298-18290	Sequence 18290, A	645	26	54.2	444	11	US-11-172-740-716	Sequence 716, App
573	26	54.2	336	11	US-11-087-099-6092	Sequence 6092, Ap	646	26	54.2	445	11	US-11-172-740-458	Sequence 458, App
574	26	54.2	336	11	US-11-188-298-2907	Sequence 2907, Ap	647	26	54.2	445	11	US-11-172-740-460	Sequence 460, App
575	26	54.2	337	11	US-11-188-298-4654	Sequence 4654, Ap	648	26	54.2	445	11	US-11-172-740-462	Sequence 462, App
576	26	54.2	337	11	US-11-079-463-8325	Sequence 8325, Ap	649	26	54.2	445	11	US-11-172-740-464	Sequence 464, App
577	26	54.2	338	11	US-11-188-298-5688	Sequence 5688, Ap	650	26	54.2	445	11	US-11-172-740-465	Sequence 465, App
578	26	54.2	339	11	US-11-096-568A-30980	Sequence 30980, A	651	26	54.2	445	11	US-11-172-740-467	Sequence 467, App
579	26	54.2	341	9	US-10-506-454-619	Sequence 619, App	652	26	54.2	445	11	US-11-172-740-469	Sequence 469, App
580	26	54.2	341	11	US-11-188-298-2695	Sequence 2695, Ap	653	26	54.2	445	11	US-11-172-740-708	Sequence 708, App
581	26	54.2	342	11	US-11-188-298-4673	Sequence 4673, Ap	654	26	54.2	445	11	US-11-172-740-709	Sequence 709, App
582	26	54.2	344	11	US-11-188-298-19120	Sequence 19120, A	655	26	54.2	445	11	US-11-172-740-711	Sequence 711, App
583	26	54.2	346	11	US-11-188-298-30979	Sequence 30979, A	656	26	54.2	445	11	US-11-172-740-714	Sequence 714, App
584	26	54.2	347	11	US-11-096-568A-20363	Sequence 20363, A	657	26	54.2	445	11	US-11-172-740-715	Sequence 715, App
585	26	54.2	349	11	US-11-188-298-13346	Sequence 13346, A	658	26	54.2	446	11	US-11-096-568A-32153	Sequence 32153, A
586	26	54.2	350	9	US-10-506-454-1377	Sequence 1377, Ap	659	26	54.2	447	11	US-11-096-568A-10370	Sequence 10370, A
587	26	54.2	354	11	US-11-108-528-72	Sequence 72, App1	660	26	54.2	447	11	US-11-172-740-463	Sequence 463, App
588	26	54.2	354	11	US-11-108-528-74	Sequence 74, App1	661	26	54.2	447	11	US-11-172-740-466	Sequence 466, App
589	26	54.2	354	11	US-11-188-298-4983	Sequence 4983, Ap	662	26	54.2	447	11	US-11-172-740-468	Sequence 468, App
590	26	54.2	362	9	US-10-517-939-88	Sequence 88, App1	663	26	54.2	447	11	US-11-172-740-470	Sequence 470, App
591	26	54.2	364	11	US-11-087-099-7580	Sequence 7580, Ap	664	26	54.2	447	11	US-11-172-740-712	Sequence 712, App
592	26	54.2	365	11	US-11-096-568A-22910	Sequence 22910, Ap	665	26	54.2	447	11	US-11-172-740-713	Sequence 713, App
593	26	54.2	366	11	US-11-188-298-11252	Sequence 11252, A	666	26	54.2	448	9	US-10-763-712A-69	Sequence 69, App1
594	26	54.2	367	11	US-11-096-568A-29694	Sequence 29694, A	667	26	54.2	448	9	US-10-763-712A-112	Sequence 112, App
595	26	54.2	368	11	US-11-188-298-3038	Sequence 3038, Ap	668	26	54.2	449	11	US-11-098-886-10535	Sequence 10535, A
596	26	54.2	369	9	US-10-201-525-7	Sequence 17906, A	669	26	54.2	449	11	US-11-096-568A-31741	Sequence 31741, A
597	26	54.2	376	9	US-10-201-525-5	Sequence 7, App1	670	26	54.2	452	11	US-11-096-568A-10297	Sequence 10297, A
598	26	54.2	377	9	US-10-201-525-5	Sequence 5, App1	671	26	54.2	455	11	US-11-096-568A-10297	Sequence 10297, A
599	26	54.2	377	11	US-11-121-731A-3	Sequence 3, App1	672	26	54.2	460	11	US-11-096-568A-6785	Sequence 6785, Ap
600	26	54.2	379	11	US-11-185-033-4	Sequence 9, App1	673	26	54.2	462	11	US-10-755-092-25	Sequence 25, App1
601	26	54.2	380	9	US-10-201-525-9	Sequence 9, App1	674	26	54.2	463	9	US-10-488-015-17	Sequence 17, App1
602	26	54.2	380	11	US-11-096-568A-29693	Sequence 29693, A	675	26	54.2	464	8	US-11-082-289-784	Sequence 284, App
603	26	54.2	380	11	US-11-185-033-33	Sequence 33, App1	676	26	54.2	465	11	US-11-096-568A-1517	Sequence 1517, Ap
604	26	54.2	394	11	US-11-096-568A-17325	Sequence 17325, A	677	26	54.2	466	11	US-11-096-568A-18731	Sequence 18731, A
605	26	54.2	396	8	US-10-496-399-1	Sequence 1, App1	678	26	54.2	466	11	US-11-096-568A-18731	Sequence 18731, A

679	25	54.2	466	11	US-11-096-568A-22805	Sequence 22805, A	752	26	54.2	620	11	US-11-058-727-20	Sequence 20, Appl
680	26	54.2	467	11	US-11-096-568A-10369	Sequence 10369, A	753	26	54.2	620	11	US-11-108-389-20	Sequence 20, Appl
681	26	54.2	468	11	US-11-096-568A-18730	Sequence 18730, A	754	26	54.2	620	11	US-11-224-624-20	Sequence 20, Appl
682	26	54.2	471	11	US-11-024-959-399	Sequence 399, App	755	26	54.2	622	11	US-11-045-004-780	Sequence 780, App
683	26	54.2	472	11	US-11-087-099-11838	Sequence 11838, A	756	26	54.2	630	11	US-11-096-568A-30539	Sequence 30539, A
684	26	54.2	473	11	US-11-087-099-528	Sequence 528, App	757	26	54.2	638	11	US-11-188-298-7838	Sequence 7838, Ap
685	26	54.2	473	11	US-11-087-099-8140	Sequence 8140, Ap	758	26	54.2	640	11	US-11-096-568A-31263	Sequence 31263, A
686	26	54.2	476	11	US-11-096-568A-10368	Sequence 10368, A	759	26	54.2	641	11	US-11-096-568A-30538	Sequence 30538, A
687	26	54.2	478	11	US-11-096-568A-18729	Sequence 18729, A	760	26	54.2	646	11	US-11-096-568A-30537	Sequence 30537, A
688	26	54.2	482	11	US-11-096-568A-32005	Sequence 32005, A	761	26	54.2	650	11	US-11-188-298-459	Sequence 459, App
689	26	54.2	484	11	US-11-096-568A-32965	Sequence 32965, A	762	26	54.2	669	11	US-11-058-727-6	Sequence 6, Appl
690	26	54.2	484	11	US-11-188-298-16281	Sequence 16281, A	763	26	54.2	669	11	US-11-108-389-12	Sequence 12, Appl
691	26	54.2	484	11	US-11-188-298-18120	Sequence 18120, A	764	26	54.2	669	11	US-11-108-389-12	Sequence 12, Appl
692	26	54.2	494	11	US-11-188-298-573	Sequence 573, App	765	26	54.2	669	11	US-11-224-624-6	Sequence 6, Appl
693	26	54.2	496	11	US-11-188-298-17398	Sequence 17398, A	766	26	54.2	669	11	US-11-224-624-6	Sequence 12, Appl
694	26	54.2	498	11	US-11-096-568A-31740	Sequence 31740, A	767	26	54.2	669	11	US-11-224-624-12	Sequence 12, Appl
695	26	54.2	499	11	US-11-087-099-10769	Sequence 10769, A	768	26	54.2	673	11	US-11-058-727-8	Sequence 8, Appl
696	26	54.2	499	11	US-11-096-568A-20412	Sequence 20412, A	769	26	54.2	673	11	US-11-058-727-14	Sequence 14, Appl
697	26	54.2	499	11	US-11-188-298-9952	Sequence 9952, Ap	770	26	54.2	673	11	US-11-058-727-22	Sequence 22, Appl
698	26	54.2	505	9	US-10-703-799B-292	Sequence 292, App	771	26	54.2	673	11	US-11-058-727-26	Sequence 26, Appl
699	26	54.2	511	11	US-11-045-004-42	Sequence 42, Appl	772	26	54.2	673	11	US-11-058-727-30	Sequence 30, Appl
700	26	54.2	516	9	US-10-506-448A-2	Sequence 2, Appl	773	26	54.2	673	11	US-11-058-727-34	Sequence 34, Appl
701	26	54.2	516	11	US-11-087-099-1845	Sequence 1845, Ap	774	26	54.2	673	11	US-11-058-727-54	Sequence 54, Appl
702	26	54.2	524	9	US-10-995-561-789	Sequence 789, App	775	26	54.2	673	11	US-11-058-727-56	Sequence 56, Appl
703	26	54.2	525	11	US-11-079-463-8434	Sequence 8434, Ap	776	26	54.2	673	11	US-11-058-727-58	Sequence 58, Appl
704	26	54.2	527	11	US-11-096-568A-1516	Sequence 1516, Ap	777	26	54.2	673	11	US-11-058-727-60	Sequence 60, Appl
705	26	54.2	527	11	US-11-096-568A-22804	Sequence 22804, A	778	26	54.2	673	11	US-11-058-727-62	Sequence 62, Appl
706	26	54.2	527	11	US-11-096-568A-26860	Sequence 26860, A	779	26	54.2	673	11	US-11-058-727-64	Sequence 64, Appl
707	26	54.2	528	9	US-10-978-927-6	Sequence 6, Appl	780	26	54.2	673	11	US-11-058-727-66	Sequence 66, Appl
708	26	54.2	529	11	US-11-079-463-9534	Sequence 9534, Ap	781	26	54.2	673	11	US-11-058-727-68	Sequence 68, Appl
709	26	54.2	531	11	US-11-096-568A-20411	Sequence 20411, A	782	26	54.2	673	11	US-11-058-727-70	Sequence 70, Appl
710	26	54.2	536	10	US-11-183-218-24	Sequence 24, Appl	783	26	54.2	673	11	US-11-058-727-86	Sequence 86, Appl
711	26	54.2	536	11	US-11-183-205-24	Sequence 24, Appl	784	26	54.2	673	11	US-11-058-727-88	Sequence 88, Appl
712	26	54.2	538	11	US-11-096-568A-22803	Sequence 22803, A	785	26	54.2	673	11	US-11-058-727-90	Sequence 90, Appl
713	26	54.2	540	11	US-11-099-691-2	Sequence 2, Appl	786	26	54.2	673	11	US-11-058-727-92	Sequence 92, Appl
714	26	54.2	544	11	US-11-096-568A-20410	Sequence 20410, A	787	26	54.2	673	11	US-11-058-727-94	Sequence 94, Appl
715	26	54.2	547	8	US-10-511-937-3969	Sequence 2969, Ap	788	26	54.2	673	11	US-11-108-389-8	Sequence 8, Appl
716	26	54.2	547	9	US-10-995-561-785	Sequence 785, App	789	26	54.2	673	11	US-11-108-389-14	Sequence 14, Appl
717	26	54.2	547	9	US-10-995-561-787	Sequence 787, App	790	26	54.2	673	11	US-11-108-389-22	Sequence 22, Appl
718	26	54.2	547	9	US-10-493-909-65	Sequence 65, Appl	791	26	54.2	673	11	US-11-108-389-26	Sequence 26, Appl
719	26	54.2	547	9	US-10-501-841-114	Sequence 114, Appl	792	26	54.2	673	11	US-11-108-389-30	Sequence 30, Appl
720	26	54.2	547	11	US-11-107-028-24	Sequence 24, Appl	793	26	54.2	673	11	US-11-108-389-34	Sequence 34, Appl
721	26	54.2	548	11	US-11-188-298-6827	Sequence 6827, Ap	794	26	54.2	673	11	US-11-108-389-54	Sequence 54, Appl
722	26	54.2	553	11	US-11-087-099-9177	Sequence 9177, Ap	795	26	54.2	673	11	US-11-108-389-56	Sequence 56, Appl
723	26	54.2	556	11	US-11-096-568A-25960	Sequence 25960, A	796	26	54.2	673	11	US-11-108-389-58	Sequence 58, Appl
724	26	54.2	557	11	US-11-188-298-8022	Sequence 8022, Ap	797	26	54.2	673	11	US-11-108-389-62	Sequence 62, Appl
725	26	54.2	557	11	US-11-188-298-9316	Sequence 9316, Ap	798	26	54.2	673	11	US-11-108-389-64	Sequence 64, Appl
726	26	54.2	565	11	US-11-087-099-6955	Sequence 6955, Ap	799	26	54.2	673	11	US-11-108-389-66	Sequence 66, Appl
727	26	54.2	567	11	US-11-096-568A-29411	Sequence 29411, A	800	26	54.2	673	11	US-11-108-389-92	Sequence 92, Appl
728	26	54.2	568	11	US-11-188-298-8765	Sequence 8765, Ap	801	26	54.2	673	11	US-11-108-389-70	Sequence 70, Appl
729	26	54.2	571	11	US-11-188-298-20583	Sequence 20583, A	802	26	54.2	673	11	US-11-108-389-88	Sequence 88, Appl
730	26	54.2	577	11	US-11-096-568A-1515	Sequence 1515, Ap	803	26	54.2	673	11	US-11-108-389-86	Sequence 86, Appl
731	26	54.2	578	11	US-11-096-568A-25959	Sequence 25959, A	804	26	54.2	673	11	US-11-108-389-88	Sequence 88, Appl
732	26	54.2	580	11	US-11-096-568A-18064	Sequence 18064, A	805	26	54.2	673	11	US-11-108-389-88	Sequence 90, Appl
733	26	54.2	582	11	US-11-188-298-9047	Sequence 9047, Ap	806	26	54.2	673	11	US-11-108-389-92	Sequence 92, Appl
734	26	54.2	584	11	US-11-096-568A-31265	Sequence 31265, A	807	26	54.2	673	11	US-11-108-389-94	Sequence 94, Appl
735	26	54.2	591	11	US-11-096-568A-31982	Sequence 31982, A	808	26	54.2	673	11	US-11-224-624-8	Sequence 8, Appl
736	26	54.2	592	11	US-11-188-298-422	Sequence 422, App	809	26	54.2	673	11	US-11-224-624-14	Sequence 14, Appl
737	26	54.2	593	11	US-11-188-298-11962	Sequence 11982, A	810	26	54.2	673	11	US-11-224-624-22	Sequence 22, Appl
738	26	54.2	593	11	US-11-188-298-14123	Sequence 14123, A	811	26	54.2	673	11	US-11-224-624-26	Sequence 26, Appl
739	26	54.2	593	11	US-11-188-298-18740	Sequence 18740, A	812	26	54.2	673	11	US-11-224-624-30	Sequence 30, Appl
740	26	54.2	594	11	US-11-188-298-18849	Sequence 18849, A	813	26	54.2	673	11	US-11-224-624-34	Sequence 34, Appl
741	26	54.2	595	11	US-11-188-298-18101	Sequence 18101, A	814	26	54.2	673	11	US-11-224-624-54	Sequence 54, Appl
742	26	54.2	595	11	US-11-188-298-20667	Sequence 20667, A	815	26	54.2	673	11	US-11-224-624-56	Sequence 56, Appl
743	26	54.2	600	11	US-11-188-298-14041	Sequence 14041, A	816	26	54.2	673	11	US-11-224-624-58	Sequence 58, Appl
744	26	54.2	607	11	US-11-096-568A-31981	Sequence 31981, A	817	26	54.2	673	11	US-11-224-624-60	Sequence 60, Appl
745	26	54.2	610	11	US-11-096-568A-31264	Sequence 31264, A	818	26	54.2	673	11	US-11-224-624-62	Sequence 62, Appl
746	26	54.2	612	9	US-10-518-018-1	Sequence 1, Appl	819	26	54.2	673	11	US-11-224-624-64	Sequence 64, Appl
747	26	54.2	615	11	US-11-188-298-5550	Sequence 5550, Ap	820	26	54.2	673	11	US-11-224-624-66	Sequence 66, Appl
748	26	54.2	616	11	US-11-058-727-16	Sequence 16, Appl	821	26	54.2	673	11	US-11-224-624-68	Sequence 68, Appl
749	26	54.2	616	11	US-11-108-389-16	Sequence 16, Appl	822	26	54.2	673	11	US-11-224-624-70	Sequence 70, Appl
750	26	54.2	616	11	US-11-224-624-16	Sequence 16, Appl	823	26	54.2	673	11	US-11-224-624-86	Sequence 86, Appl
751	26	54.2	617	11	US-11-188-298-8258	Sequence 8258, Ap	824	26	54.2	673	11	US-11-224-624-88	Sequence 88, Appl

825	26	54.2	673	11	US-11-224-624-90	Sequence 90, App1	898	26	54.2	884	11	US-11-087-099-6692	Sequence 6692, Ap
826	26	54.2	673	11	US-11-224-624-92	Sequence 92, App1	899	26	54.2	888	9	US-10-131-826A-544	Sequence 544, App
827	26	54.2	673	11	US-11-224-624-94	Sequence 94, App1	900	26	54.2	888	9	US-10-973-115B-544	Sequence 544, App
828	26	54.2	674	11	US-11-058-727-44	Sequence 44, App1	901	26	54.2	888	9	US-10-226-488-35	Sequence 35, App1
829	26	54.2	674	11	US-11-058-727-50	Sequence 50, App1	902	26	54.2	888	9	US-10-137-873A-544	Sequence 544, App
830	26	54.2	674	11	US-11-058-727-76	Sequence 76, App1	903	26	54.2	888	9	US-10-152-370-544	Sequence 544, App
831	26	54.2	674	11	US-11-058-727-82	Sequence 82, App1	904	26	54.2	888	11	US-11-290-153-544	Sequence 544, App
832	26	54.2	674	11	US-11-108-389-44	Sequence 44, App1	905	26	54.2	904	11	US-11-096-568A-29409	Sequence 29409, A
833	26	54.2	674	11	US-11-108-389-50	Sequence 50, App1	906	26	54.2	933	9	US-10-330-773-106	Sequence 106, App
834	26	54.2	674	11	US-11-108-389-76	Sequence 76, App1	907	26	54.2	942	9	US-10-928-446A-190	Sequence 190, App
835	26	54.2	674	11	US-11-108-389-82	Sequence 82, App1	908	26	54.2	946	9	US-10-330-773-101	Sequence 101, App
836	26	54.2	674	11	US-11-224-624-44	Sequence 44, App1	909	26	54.2	947	9	US-10-928-446A-182	Sequence 182, App
837	26	54.2	674	11	US-11-224-624-50	Sequence 50, App1	910	26	54.2	948	9	US-10-330-773-104	Sequence 104, App
838	26	54.2	674	11	US-11-224-624-76	Sequence 76, App1	911	26	54.2	950	9	US-10-928-446A-184	Sequence 184, App
839	26	54.2	674	11	US-11-224-624-82	Sequence 82, App1	912	26	54.2	955	9	US-10-928-446A-186	Sequence 186, App
840	26	54.2	675	11	US-11-058-727-42	Sequence 42, App1	913	26	54.2	965	11	US-11-172-145-4	Sequence 4, App1
841	26	54.2	675	11	US-11-058-727-46	Sequence 46, App1	914	26	54.2	972	11	US-11-124-215-3	Sequence 3, App1
842	26	54.2	675	11	US-11-058-727-48	Sequence 48, App1	915	26	54.2	976	11	US-11-203-251A-76	Sequence 76, App1
843	26	54.2	675	11	US-11-058-727-74	Sequence 74, App1	916	26	54.2	990	9	US-10-330-773-108	Sequence 108, App
844	26	54.2	675	11	US-11-058-727-78	Sequence 78, App1	917	26	54.2	1032	9	US-10-392-234A-67	Sequence 67, App1
845	26	54.2	675	11	US-11-058-727-80	Sequence 80, App1	918	26	54.2	1115	9	US-10-194-487-440	Sequence 440, App
846	26	54.2	675	11	US-11-108-389-42	Sequence 42, App1	919	26	54.2	1115	9	US-10-195-883-440	Sequence 440, App
847	26	54.2	675	11	US-11-108-389-46	Sequence 46, App1	920	26	54.2	1115	9	US-10-195-888-440	Sequence 440, App
848	26	54.2	675	11	US-11-108-389-48	Sequence 48, App1	921	26	54.2	1115	9	US-10-195-889-440	Sequence 440, App
849	26	54.2	675	11	US-11-108-389-74	Sequence 74, App1	922	26	54.2	1142	11	US-11-087-099-6734	Sequence 6734, Ap
850	26	54.2	675	11	US-11-108-389-78	Sequence 78, App1	923	26	54.2	1170	9	US-10-330-773-864	Sequence 864, App
851	26	54.2	675	11	US-11-108-389-80	Sequence 80, App1	924	26	54.2	1206	11	US-11-058-727-2	Sequence 2, App1
852	26	54.2	675	11	US-11-224-624-42	Sequence 42, App1	925	26	54.2	1206	11	US-11-108-389-2	Sequence 2, App1
853	26	54.2	675	11	US-11-224-624-46	Sequence 46, App1	926	26	54.2	1206	11	US-11-224-624-2	Sequence 2, App1
854	26	54.2	675	11	US-11-224-624-48	Sequence 48, App1	927	26	54.2	1210	11	US-11-058-727-4	Sequence 4, App1
855	26	54.2	675	11	US-11-224-624-74	Sequence 74, App1	928	26	54.2	1210	11	US-11-108-389-4	Sequence 4, App1
856	26	54.2	675	11	US-11-224-624-78	Sequence 78, App1	929	26	54.2	1210	11	US-11-124-624-4	Sequence 10688, A
857	26	54.2	675	11	US-11-224-624-80	Sequence 80, App1	930	26	54.2	1211	11	US-11-188-288-10688	Sequence 62, App1
858	26	54.2	676	11	US-11-058-727-40	Sequence 40, App1	931	26	54.2	1260	11	US-10-995-561-665	Sequence 665, App
859	26	54.2	676	11	US-11-058-727-72	Sequence 72, App1	932	26	54.2	1266	9	US-11-137-465-62	Sequence 655, App
860	26	54.2	676	11	US-11-108-389-40	Sequence 40, App1	933	26	54.2	1372	11	US-11-087-099-3054	Sequence 3054, Ap
861	26	54.2	676	11	US-11-108-389-72	Sequence 72, App1	934	26	54.2	1372	11	US-11-188-288-13921	Sequence 13921, A
862	26	54.2	676	11	US-11-224-624-40	Sequence 40, App1	935	26	54.2	1394	11	US-11-115-639-52	Sequence 52, App1
863	26	54.2	676	11	US-11-224-624-72	Sequence 72, App1	936	26	54.2	1394	11	US-11-115-639-53	Sequence 53, App1
864	26	54.2	677	11	US-11-058-727-52	Sequence 52, App1	937	26	54.2	1394	11	US-11-115-639-54	Sequence 54, App1
865	26	54.2	677	11	US-11-058-727-84	Sequence 84, App1	938	26	54.2	1394	11	US-11-115-639-55	Sequence 55, App1
866	26	54.2	677	11	US-11-108-389-52	Sequence 52, App1	939	26	54.2	1445	11	US-11-024-959-367	Sequence 367, App1
867	26	54.2	677	11	US-11-108-389-84	Sequence 84, App1	940	26	54.2	1441	11	US-11-096-568A-34298	Sequence 34298, A
868	26	54.2	677	11	US-11-224-624-52	Sequence 52, App1	941	26	54.2	1480	11	US-11-096-568A-34297	Sequence 34297, A
869	26	54.2	677	11	US-11-224-624-84	Sequence 84, App1	942	26	54.2	1488	11	US-11-124-367A-402	Sequence 34296, A
870	26	54.2	679	11	US-11-079-463-9258	Sequence 9258, Ap	943	26	54.2	1515	11	US-11-124-367A-401	Sequence 401, App
871	26	54.2	694	11	US-11-096-568A-26859	Sequence 26859, A	944	26	54.2	1515	11	US-11-124-367A-402	Sequence 402, App
872	26	54.2	694	11	US-11-188-298-4546	Sequence 4546, Ap	945	26	54.2	1532	11	US-11-124-367A-403	Sequence 403, App
873	26	54.2	696	11	US-11-087-099-11029	Sequence 11029, A	946	26	54.2	1532	11	US-11-124-367A-404	Sequence 404, App
874	26	54.2	698	11	US-11-229-769-200	Sequence 200, App1	947	26	54.2	1532	11	US-11-124-367A-405	Sequence 405, App
875	26	54.2	704	11	US-11-172-145-25	Sequence 25, App1	948	26	54.2	1532	11	US-11-124-367A-407	Sequence 407, App
876	26	54.2	713	11	US-11-052-554A-74	Sequence 74, App1	949	26	54.2	1535	11	US-11-124-367A-408	Sequence 408, App
877	26	54.2	724	9	US-10-793-626-1082	Sequence 3082, Ap	950	26	54.2	1652	9	US-10-995-561-663	Sequence 663, App
878	26	54.2	737	11	US-11-152-366-28	Sequence 28, App1	951	26	54.2	1652	9	US-10-505-928-227	Sequence 227, App
879	26	54.2	737	11	US-11-072-312-2689	Sequence 2689, Ap	952	26	54.2	1782	8	US-10-495-083-9	Sequence 9, App1
880	26	54.2	744	8	US-10-505-928-493	Sequence 493, App	953	26	54.2	1809	9	US-10-370-959-67	Sequence 67, App1
881	26	54.2	744	11	US-11-186-284-37	Sequence 37, App1	954	26	54.2	1855	11	US-11-096-568A-31249	Sequence 31249, A
882	26	54.2	744	11	US-11-186-284-39	Sequence 39, App1	955	26	54.2	1885	11	US-11-288-493-64	Sequence 64, App1
883	26	54.2	747	11	US-11-188-298-17849	Sequence 17849, A	956	26	54.2	1912	11	US-11-096-568A-31248	Sequence 31248, A
884	26	54.2	788	8	US-10-485-346-2	Sequence 2, App1	957	26	54.2	1912	11	US-11-079-463-6265	Sequence 6265, Ap
885	26	54.2	797	11	US-11-087-099-11959	Sequence 11959, A	958	26	54.2	1938	9	US-10-995-561-661	Sequence 661, App
886	26	54.2	797	11	US-11-188-298-22120	Sequence 22120, A	959	26	54.2	1938	9	US-10-995-561-662	Sequence 662, App
887	26	54.2	824	9	US-10-330-773-110	Sequence 110, App	960	26	54.2	1938	9	US-10-995-561-660	Sequence 660, App
888	26	54.2	824	11	US-11-096-568A-26858	Sequence 26858, A	961	26	54.2	1960	9	US-10-928-446A-192	Sequence 192, App
889	26	54.2	828	11	US-11-096-568A-29410	Sequence 29410, A	962	26	54.2	1960	11	US-10-928-446A-194	Sequence 194, App
890	26	54.2	834	9	US-10-928-446A-188	Sequence 188, App	963	26	54.2	1960	11	US-10-928-446A-196	Sequence 196, App
891	26	54.2	834	9	US-10-928-446A-192	Sequence 192, App	964	26	54.2	1960	11	US-10-928-446A-198	Sequence 198, App
892	26	54.2	834	9	US-10-928-446A-194	Sequence 194, App	965	26	54.2	1976	11	US-11-069-834-52	Sequence 52, App1
893	26	54.2	834	9	US-10-928-446A-196	Sequence 196, App	966	26	54.2	1976	11	US-11-069-834-54	Sequence 54, App1
894	26	54.2	834	9	US-10-928-446A-198	Sequence 198, App	967	26	54.2	1992	11	US-11-069-834-58	Sequence 58, App1
895	26	54.2	834	9	US-10-928-446A-200	Sequence 200, App	968	26	54.2	1992	11	US-11-069-834-58	Sequence 58, App1
896	26	54.2	834	9	US-10-928-446A-202	Sequence 202, App	969	26	54.2	1992	11	US-11-069-834-58	Sequence 58, App1
897	26	54.2	852	9	US-10-467-657-5004	Sequence 5004, Ap	970	26	54.2	1992	11	US-11-096-568A-31247	Sequence 31247, A

```
971 26 54.2 1995 11 US-11-069-834-60 Sequence 60, Appl
972 26 54.2 2000 11 US-11-069-834-56 Sequence 56, Appl
973 26 54.2 2004 9 US-10-467-657-84 Sequence 84, Appl
974 26 54.2 2004 9 US-10-467-657-84 Sequence 84, Appl
975 26 54.2 2295 11 US-11-087-099-5450 Sequence 5450, Ap
976 26 54.2 2295 11 US-11-124-367A-467 Sequence 467, Ap
977 26 54.2 2597 11 US-11-124-367A-466 Sequence 466, Ap
978 26 54.2 2597 11 US-11-124-367A-468 Sequence 468, Ap
979 26 54.2 3012 11 US-11-124-367A-465 Sequence 465, Ap
980 26 54.2 3144 11 US-11-055-035-1 Sequence 1, Appl
981 26 53.1 288 11 US-11-087-099-2188 Sequence 2188, Ap
982 25 53.1 288 11 US-11-144-630-37 Sequence 37, Appl
983 25 52.1 18 11 US-11-143-114-1 Sequence 1, Appl
984 25 52.1 18 11 US-11-144-947-744 Sequence 744, Ap
985 25 52.1 21 11 US-10-467-657-9049 Sequence 9049, Ap
986 25 52.1 47 9 US-10-467-657-7336 Sequence 7336, Ap
987 25 52.1 60 11 US-11-264-096-440 Sequence 440, Ap
988 25 52.1 60 11 US-11-264-096-442 Sequence 442, Ap
989 25 52.1 60 11 US-11-188-298-13810 Sequence 13810, A
990 25 52.1 91 11 US-11-188-298-13810 Sequence 1626, Ap
991 25 52.1 91 11 US-11-264-096-1626 Sequence 179, Ap
992 25 52.1 93 11 US-11-186-284-179 Sequence 40, Appl
993 25 52.1 104 9 US-10-530-253-40 Sequence 676, Appl
994 25 52.1 118 9 US-10-995-561-676 Sequence 18301, A
995 25 52.1 120 11 US-11-188-298-18301 Sequence 1277, Ap
996 25 52.1 125 9 US-10-821-234-1277 Sequence 2256, Ap
997 25 52.1 125 11 US-11-264-096-2256 Sequence 370, Ap
998 25 52.1 127 11 US-11-176-830-370 Sequence 2079, Ap
999 25 52.1 127 11 US-11-096-568A-2079 Sequence 2, Appl
1000 25 52.1 131 11 US-11-132-947-2
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-1711
; Sequence 1711, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EXS/M-M
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1711
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1711

Query Match      100.0%; Score 48; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 YMLDLOPRT 9
Db 3 YMLDLOPRT 11

RESULT 2
US-10-511-814-8
; Sequence 8, Application US/10511814
```

```
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: US/10/511,814
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-8

Query Match      100.0%; Score 48; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.014;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 3
US-10-511-814-11
; Sequence 11, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-11
```

```
Query Match      100.0%; Score 48; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.014;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 YMLDLOPRT 9
Db 11 YMLDLOPRT 19

RESULT 4
US-10-530-253-14
; Sequence 14, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
```


APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 14
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-14

Query Match 100.0%; Score 48; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.014;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
DB 11 YMLDLOPET 19

RESULT 5
US-11-179-478-4
Sequence 4, Application US/11179478
Publication No. US20050249745A1
GENERAL INFORMATION:

APPLICANT: BURGER, Alexander
APPLICANT: HALBEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
TITLE OF INVENTION: FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/179,478
FILING DATE: 13-JULY-2005

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003
CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:
NAME: Sandecock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELEPHONE: (202) 672-5300

TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:

LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-11-179-478-4

Query Match 100.0%; Score 48; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.014;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
DB 11 YMLDLOPET 19

RESULT 6
US-10-530-253-1
Sequence 1, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-1

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
DB 161 YMLDLOPET 169

RESULT 7

US-10-530-253-3
Sequence 3, Application US/10530253
Publication No. US20060014926A1

GENERAL INFORMATION:

APPLICANT: Cassetti, Maria C.

APPLICANT: Smith, Larry

APPLICANT: Jeffrey K. Pullen

APPLICANT: Susan P. McElhinney

TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS

FILE REFERENCE: 00630/100M137-US2

CURRENT APPLICATION NUMBER: US/10/530,253

CURRENT FILING DATE: 2005-04-04

PRIOR APPLICATION NUMBER: PCT/US2003/031726

PRIOR FILING DATE: 2003-10-02

PRIOR APPLICATION NUMBER: US 60/415,929

PRIOR FILING DATE: 2002-10-03

NUMBER OF SEQ ID NOS: 65

SOFTWARE: PatentIn version 3.1

SEQ ID NO 3

LENGTH: 248

TYPE: PRT

ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9

Db 161 YMLDLOPRT 169

```
RESULT 8
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPRT 9
Db 161 YMLDLOPRT 169

```
RESULT 9
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPRT 9
Db 11 YMLDLOPRT 19

RESULT 10

```
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPRT 9
Db 11 YMLDLOPRT 19

```
RESULT 11
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11
```

Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 YMLDLOPRT 9
Db 11 YMLDLOPRT 19

```
RESULT 12
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANG, XIAOWU
```

```
/ TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
/ FILE REFERENCE: 116620-003
/ CURRENT APPLICATION NUMBER: US/11/192,923A
/ PRIOR FILING DATE: 2005-07-29
/ PRIOR APPLICATION NUMBER: CN 03115272.4
/ PRIOR FILING DATE: 2003-01-30
/ PRIOR APPLICATION NUMBER: CN 03115273.2
/ PRIOR FILING DATE: 2003-01-30
/ NUMBER OF SEQ ID NOS: 45
/ SOFTWARE: PatentIn Ver. 3.3
/ SEQ ID NO 2
/ LENGTH: 256
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match          100.0%; Score 48; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
DB 11 YMLDLOPET 19

RESULT 13
US-10-530-061-1731
/ Sequence 1731, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SOUTHWOOD, JOHN
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.033US02/EKS/M-W
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 1731
/ LENGTH: 15
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-1731

Query Match          91.7%; Score 44; DB 9; Length 15;
Best Local Similarity 88.9%; Pred. No. 0.01;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
DB 3 YMLDLOPET 11

RESULT 14
US-10-530-253-34
/ Sequence 34, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casasetti, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McWhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M17-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
```

```
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 34
/ LENGTH: 99
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 52
US-10-530-253-34

Query Match          91.7%; Score 44; DB 9; Length 99;
Best Local Similarity 88.9%; Pred. No. 0.086;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPET 9
DB 11 YMLDLOPET 19

RESULT 15
US-10-530-061-1749
/ Sequence 1749, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SOUTHWOOD, JOHN
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.033US02/EKS/M-W
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 1749
/ LENGTH: 15
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-1749

Query Match          85.4%; Score 41; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.041;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLOPET 9
DB 1 MLDLOPET 8

RESULT 16
US-10-530-061-1720
/ Sequence 1720, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SOUTHWOOD, SCOTT
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.033US02/EKS/M-W
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
```

/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO: 1720
/ LENGTH: 15
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-1720

Query Match 81.2%; Score 39; DB 9; Length 15;
Best Local Similarity 87.5%; Pred. No. 0.1;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
DB 3 YVLDLQPE 10

RESULT 17
US-10-530-253-28
/ Sequence 28, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Cassecci, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO: 28
/ LENGTH: 98
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 31
US-10-530-253-28

Query Match 81.2%; Score 39; DB 9; Length 98;
Best Local Similarity 87.5%; Pred. No. 0.84;
Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
DB 11 YVLDLQPE 18

RESULT 18
US-10-530-253-30
/ Sequence 30, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Cassecci, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO: 30

/ LENGTH: 99
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 35
US-10-530-253-30

Query Match 75.0%; Score 36; DB 9; Length 99;
Best Local Similarity 75.0%; Pred. No. 3.3;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
DB 11 YVLDLQPE 18

RESULT 19
US-10-467-657-5266
/ Sequence 5266, Application US/10467657
/ Publication No. US20050260581A1
/ GENERAL INFORMATION:
/ APPLICANT: CHIRON SPA
/ APPLICANT: FONTANA Maria Rita
/ APPLICANT: PIZZA Mariagrazia
/ APPLICANT: MASIGNANI Vega
/ APPLICANT: MONACI Elisabetta
/ TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
/ FILE REFERENCE:
/ CURRENT APPLICATION NUMBER: US/10/467,657
/ CURRENT FILING DATE: 2003-08-11
/ PRIOR APPLICATION NUMBER: GB-0103424.8
/ PRIOR FILING DATE: 2001-02-12
/ NUMBER OF SEQ ID NOS: 9218
/ SOFTWARE: SeqWin99, version 1.04
/ SEQ ID NO: 5266
/ LENGTH: 395
/ TYPE: PRT
/ ORGANISM: Neisseria gonorrhoeae
US-10-467-657-5266

Query Match 72.9%; Score 35; DB 9; Length 395;
Best Local Similarity 75.0%; Pred. No. 25;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLQPE 9
DB 364 MLDLQPE 371

RESULT 20
US-10-530-061-1745
/ Sequence 1745, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SOUTHWOOD, SCOTT
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.03JUS02/EKS/M-M
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO: 1745
/ LENGTH: 15
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-1745

Query Match 70.8%; Score 34; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
|:|||||
DB 3 YLIDLHPE 10

RESULT 21

US-10-530-061-1751
; Sequence 1751, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/W-M
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1751
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1751

Query Match 70.8%; Score 34; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
|:|||||
DB 4 YLIDLHPE 11

RESULT 22

US-10-530-253-36
; Sequence 36, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasecti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 36
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 58
US-10-530-253-36

Query Match 70.8%; Score 34; DB 9; Length 98;
Best Local Similarity 75.0%; Pred. No. 8.2;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
|:|||||
DB 11 YLIDLHPE 18

RESULT 23

US-11-188-298-3960
; Sequence 3960, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 3960
; LENGTH: 324
; TYPE: PRT
; ORGANISM: Neisseria meningitidis MC58
US-11-188-298-3960

Query Match 70.8%; Score 34; DB 11; Length 324;
Best Local Similarity 85.7%; Pred. No. 31;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLOPE 8
|:|||||
DB 293 MLDLOPE 299

RESULT 24

US-11-087-099-10725
; Sequence 10725, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B BP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 10725
; LENGTH: 646
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-087-099-10725

Query Match 70.8%; Score 34; DB 11; Length 646;
Best Local Similarity 85.7%; Pred. No. 68;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLOPE 8
|:|||||
DB 66 MLDLOPE 72

RESULT 25

US-11-188-298-9913
; Sequence 9913, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 9913

LENGTH: 646
TYPE: PRT
ORGANISM: Candida albicans
US-11-188-298-9913

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 646;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLQPE 8
|:|||||
Db 66 MLDLQPE 72

RESULT 26
US-11-087-099-8952
Sequence 8952, Application US/11087099
Publication No. US20060041961A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 8952
LENGTH: 698
TYPE: PRT
ORGANISM: Candida albicans
US-11-087-099-8952

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLQPE 8
|:|||||
Db 66 MLDLQPE 72

RESULT 27
US-11-087-099-9341
Sequence 9341, Application US/11087099
Publication No. US20060041961A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 9341
LENGTH: 698
TYPE: PRT
ORGANISM: Candida albicans
US-11-087-099-9341

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLQPE 8
|:|||||
Db 66 MLDLQPE 72

RESULT 28
US-11-188-298-8685
Sequence 8685, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT

FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 8685
LENGTH: 698
TYPE: PRT
ORGANISM: Candida albicans
US-11-188-298-8685

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLQPE 8
|:|||||
Db 66 MLDLQPE 72

RESULT 29
US-11-188-298-19289
Sequence 19289, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 19289
LENGTH: 698
TYPE: PRT
ORGANISM: Candida albicans
US-11-188-298-19289

Query Match
Best Local Similarity 70.8%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 MLDLQPE 8
|:|||||
Db 66 MLDLQPE 72

RESULT 30
US-11-218-020-15
Sequence 15, Application US/11218020
Publication No. US20060073562A1
GENERAL INFORMATION:
APPLICANT: Zhang, Weiguo
TITLE OF INVENTION: The Protein Tyrosine Kinase Substrate LAT and Its Use in the
FILE REFERENCE: NIH-05065
CURRENT APPLICATION NUMBER: US/11/218,020
CURRENT FILING DATE: 2005-08-31
PRIOR APPLICATION NUMBER: US/09/597,920
PRIOR FILING DATE: 2000-06-19
PRIOR APPLICATION NUMBER: PCT/US98/27400
PRIOR FILING DATE: 1998-12-23
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn version 3.1
SEQ ID NO 15
LENGTH: 696
TYPE: PRT
ORGANISM: Homo sapiens
US-11-218-020-15

QY 2 MLDLQPE 8
|:|||||
Db 66 MLDLQPE 72

Query Match 70.8%; Score 34; DB 11; Length 896;
 Best Local Similarity 66.7%; Pred. No. 98;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDLOPE 9
 :|||:
 Db 81 YLIDLDPDT 89

RESULT 31
 US-10-511-937-2429

; Sequence 2429, Application US/10511937
 ; Publication No. US2006008836A1
 ; GENERAL INFORMATION:
 ; APPLICANT: EXPRESSION DIAGNOSTICS, INC.
 ; APPLICANT: Mohlgemuth, Jay
 ; APPLICANT: Fry, Kirk
 ; APPLICANT: Woodward, Robert
 ; APPLICANT: Ly, Ngoc
 ; APPLICANT: Prentice, James
 ; APPLICANT: Morris, MacDonald
 ; APPLICANT: Rosenberg, Steven
 ; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING
 ; TITLE OF INVENTION: AND MONITORING TRANSPLANT REJECTION
 ; FILE REFERENCE: 506612000104
 ; CURRENT APPLICATION NUMBER: US/10/511,937
 ; CURRENT FILING DATE: 2004-10-19
 ; PRIOR APPLICATION NUMBER: PCT/US2003/012946
 ; PRIOR FILING DATE: 2003-04-24
 ; PRIOR APPLICATION NUMBER: US 10/131,831
 ; PRIOR FILING DATE: 2002-04-24
 ; PRIOR APPLICATION NUMBER: US 10/325,899
 ; PRIOR FILING DATE: 2002-12-20
 ; NUMBER OF SEQ ID NOS: 3117
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 2429
 ; LENGTH: 1039
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-511-937-2429

Query Match 70.8%; Score 34; DB 8; Length 1039;
 Best Local Similarity 62.5%; Pred. No. 1.2e+02;
 Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
 :|||:
 Db 845 YLIDLDPQ 852

RESULT 32
 US-10-530-061-1724
 ; Sequence 1724, Application US/10530061
 ; Publication No. US20060079453A1
 ; GENERAL INFORMATION:
 ; APPLICANT: SIDNEY, JOHN
 ; APPLICANT: SOUTHWOOD, SCOTT
 ; APPLICANT: SETTE, ALESSANDRO
 ; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
 ; FILE REFERENCE: 2060.033US02/EKS/M-M
 ; CURRENT APPLICATION NUMBER: US/10/530,061
 ; CURRENT FILING DATE: 2005-04-04
 ; PRIOR APPLICATION NUMBER: PCT/US03/31308
 ; PRIOR FILING DATE: 2003-10-03
 ; PRIOR APPLICATION NUMBER: 60/416,207
 ; PRIOR FILING DATE: 2002-10-03
 ; PRIOR APPLICATION NUMBER: 60/417,269
 ; PRIOR FILING DATE: 2002-10-08
 ; NUMBER OF SEQ ID NOS: 2503
 ; SOFTWARE: PatentIn version 3.3
 ; SEQ ID NO 1724
 ; LENGTH: 15
 ; TYPE: PRT

; ORGANISM: Human papillomavirus
 ; US-10-530-061-1724

Query Match 68.8%; Score 33; DB 9; Length 15;
 Best Local Similarity 75.0%; Pred. No. 1.6;
 Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
 :|||:
 Db 3 YVLDLYPE 10

RESULT 33
 US-10-530-253-29

; Sequence 29, Application US/10530253
 ; Publication No. US20060014926A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Cassetti, Maria C.
 ; APPLICANT: Smith, Larry
 ; APPLICANT: Jeffrey K. Pullen
 ; APPLICANT: Susan P. McElhinney
 ; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
 ; FILE REFERENCE: 00630/100M137-US2
 ; CURRENT APPLICATION NUMBER: US/10/530,253
 ; CURRENT FILING DATE: 2005-04-04
 ; PRIOR APPLICATION NUMBER: PCT/US2003/031726
 ; PRIOR FILING DATE: 2003-10-02
 ; PRIOR APPLICATION NUMBER: US 60/415,929
 ; PRIOR FILING DATE: 2002-10-03
 ; NUMBER OF SEQ ID NOS: 65
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 29
 ; LENGTH: 97
 ; TYPE: PRT
 ; ORGANISM: Human papillomavirus type 33
 ; US-10-530-253-29

Query Match 68.8%; Score 33; DB 9; Length 97;
 Best Local Similarity 75.0%; Pred. No. 13;
 Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDLOPE 8
 :|||:
 Db 11 YVLDLYPE 18

RESULT 34
 US-11-188-298-18028
 ; Sequence 18028, Application US/11188298
 ; Publication No. US20060075522A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abad, Mark S. et al.
 ; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
 ; FILE REFERENCE: 38-21(53452)B
 ; CURRENT APPLICATION NUMBER: US/11/188,298
 ; CURRENT FILING DATE: 2005-07-22
 ; PRIOR APPLICATION NUMBER: 60/592,978
 ; PRIOR FILING DATE: 2004-07-31
 ; NUMBER OF SEQ ID NOS: 22569
 ; SEQ ID NO 18028
 ; LENGTH: 257
 ; TYPE: PRT
 ; ORGANISM: Pisum sativum
 ; US-11-188-298-18028

Query Match 68.8%; Score 33; DB 11; Length 257;
 Best Local Similarity 66.7%; Pred. No. 38;
 Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 YMLDLOPE 9
 :|||:
 Db 49 FXLDIMPET 57

```
RESULT 35
US-11-072-512-2534
; Sequence 2534, Application US/11072512
; Publication No. US20060029945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
; APPLICANT: HIO, YUKI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: TAMECHIKA, ICHIRO
; APPLICANT: SEKI, NAOHITO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTOMYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: Novel full length cDNA
; FILE REFERENCE: 084335-0191
; CURRENT APPLICATION NUMBER: US/11/072,512
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US 60/350,978
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: JP 2001-379298
; PRIOR FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2534
; LENGTH: 384
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-072-512-2534

Query Match      68.8%; Score 33; DB 11; Length 384;
Best Local Similarity 55.6%; Pred. No. 60;
Matches 5; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY      1 YMLDQPRT 9
Db      92 HLLRLQPCR 100

RESULT 36
US-11-188-298-18665
; Sequence 18665, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 18665
; LENGTH: 398
; TYPE: PRT
; ORGANISM: Bacillus subtilis subsp. subtilis str. 168
US-11-188-298-18665

Query Match      68.8%; Score 33; DB 11; Length 398;
Best Local Similarity 66.7%; Pred. No. 63;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      1 YMLDQPRT 9
```

```
Db      87 YGIDLDPRT 95

RESULT 37
US-11-188-298-286
; Sequence 286, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 286
; LENGTH: 486
; TYPE: PRT
; ORGANISM: Bacillus subtilis subsp. subtilis str. 168
US-11-188-298-286

Query Match      68.8%; Score 33; DB 11; Length 486;
Best Local Similarity 66.7%; Pred. No. 78;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      1 YMLDQPRT 9
Db      175 YGIDLDPRT 183

RESULT 38
US-11-087-099-4252
; Sequence 4252, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 4252
; LENGTH: 510
; TYPE: PRT
; ORGANISM: Nicotiana tabacum
US-11-087-099-4252

Query Match      68.8%; Score 33; DB 11; Length 510;
Best Local Similarity 75.0%; Pred. No. 83;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      2 MLDLQPRT 9
Db      3 LLDLQPRT 10

RESULT 39
US-11-188-298-14373
; Sequence 14373, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 14373
; LENGTH: 510
```


TYPE: PRT
ORGANISM: Nicotiana tabacum
US-11-188-298-14373

Query Match 68.8%; Score 33; DB 11; Length 510;
Best Local Similarity 75.0%; Pred. No. 83;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 MLDLQPT 9
DB 3 LLDLQPT 10

RESULT 40
US-11-087-099-6798
Sequence 6798, Application US/11087099
Publication No. US20060041961A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450) B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 6798
LENGTH: 512
TYPE: PRT
ORGANISM: Glomerella cingulata
US-11-087-099-6798

Query Match 68.8%; Score 33; DB 11; Length 512;
Best Local Similarity 75.0%; Pred. No. 83;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 YMLDQPE 8
DB 49 YKLDLRPE 56

RESULT 41
US-10-131-826A-332
Sequence 332, Application US/10131826A
Publication No. US20050245730A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: Deforge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115

PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 332
LENGTH: 552
TYPE: PRT
ORGANISM: Homo Sapien
US-10-131-826A-332

Query Match 68.8%; Score 33; DB 9; Length 552;
Best Local Similarity 66.7%; Pred. No. 90;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 YMLDQPT 9
DB 308 YFLTQPT 316

RESULT 42
US-10-973-115B-332
Sequence 332, Application US/10973115B
Publication No. US20060040351A1
GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: Deforge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING
FILE REFERENCE: 39870-3330R1C300C1
CURRENT APPLICATION NUMBER: US/10/973,115B
CURRENT FILING DATE: 2004-10-22
PRIOR APPLICATION NUMBER: US 10/145,747
PRIOR FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: US 10/028,072
PRIOR FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: PCT/US00/32678
PRIOR FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: US 09/581,742
PRIOR FILING DATE: 2000-06-16
PRIOR APPLICATION NUMBER: PCT/US00/05746
PRIOR FILING DATE: 2000-03-02
PRIOR APPLICATION NUMBER: US 60/135,736
PRIOR FILING DATE: 1999-05-25
PRIOR APPLICATION NUMBER: US 60/123,090
PRIOR FILING DATE: 1999-03-05
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 332

LENGTH: 552
TYPE: PRT
ORGANISM: Homo sapiens
US-10-973-1158-332

Query Match 68.8%; Score 33; DB 9; Length 552;
Best Local Similarity 66.7%; Pred. No. 90;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 YMLDLOPET 9
Db 308 YFLTVQPET 316

RESULT 43
US-10-137-873A-332
Sequence 332, Application US/10137873A
Publication No. US20060084138A1
GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerlitsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P333ORIC149
CURRENT APPLICATION NUMBER: US/10/137, 873A
CURRENT FILING DATE: 2002-04-23
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/051222
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR FILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 332
LENGTH: 552
TYPE: PRT
ORGANISM: Homo Sapien
US-10-137-873A-332

Query Match 68.8%; Score 33; DB 9; Length 552;
Best Local Similarity 66.7%; Pred. No. 90;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 YMLDLOPET 9
Db 308 YFLTVQPET 316

RESULT 44
US-10-152-370-332
Sequence 332, Application US/10152370
Publication No. US20060084139A1
GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerlitsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P333ORIC407
CURRENT APPLICATION NUMBER: US/10/152, 370
CURRENT FILING DATE: 2002-05-21
Prior Application removed - See file Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 332
LENGTH: 552
TYPE: PRT
ORGANISM: Homo Sapien
US-10-152-370-332

Query Match 68.8%; Score 33; DB 9; Length 552;
Best Local Similarity 66.7%; Pred. No. 90;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 YMLDLOPET 9
Db 308 YFLTVQPET 316

RESULT 45
US-11-290-153-332
Sequence 332, Application US/11290153
Publication No. US20060073568A1
GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerlitsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: ACIDS ENCODING THE SAME

```
; FILE REFERENCE: P333081C321
; CURRENT APPLICATION NUMBER: US/11/290.153
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US/10/146.728
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See file Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 332
; LENGTH: 552
; TYPE: PRT
; ORGANISM: Homo Sapien
US-11-290-153-332
```

```
Query Match      68.8%; Score 33; DB 11; Length 552;
Best Local Similarity 66.7%; Pred. No. 90;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      1 YMLDLPRT 9
Db      308 YFLVQPER 316
```

```
RESULT 46
US-10-995-561-1012
; Sequence 1012, Application US/10995561
; Publication No. US20050272054A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS OF
; FILE REFERENCE: CL001559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1012
; LENGTH: 935
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-995-561-1012
```

```
Query Match      68.8%; Score 33; DB 9; Length 935;
Best Local Similarity 66.7%; Pred. No. 1.6e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      1 YMLDLPRT 9
Db      920 YDIDLDPRT 928
```

```
RESULT 47
US-10-995-561-1013
; Sequence 1013, Application US/10995561
; Publication No. US20050272054A1
```

```
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS OF
; FILE REFERENCE: CL001559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1013
; LENGTH: 935
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-995-561-1013
```

```
Query Match      68.8%; Score 33; DB 9; Length 935;
Best Local Similarity 66.7%; Pred. No. 1.6e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      1 YMLDLPRT 9
Db      920 YDIDLDPRT 928
```

```
RESULT 48
US-10-877-346-43
; Sequence 43, Application US/10877346
; Publication No. US20060014153A1
; GENERAL INFORMATION:
; APPLICANT: Gerlach, Valerie L
; APPLICANT: MacDougall, John R
; APPLICANT: Smithson, Glenda
; APPLICANT: Miller, Isabelle
; APPLICANT: Stone, David
; APPLICANT: Gunther, Erik
; APPLICANT: Ellerman, Karen
; APPLICANT: Grosse, William M
; APPLICANT: Alsbrook II, John P
; APPLICANT: Lepley, Denise M
; APPLICANT: Burgess, Catherine E
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Kexuda, Ramesh
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Leach, Martin D
; APPLICANT: Shinkels, Richard A
; TITLE OF INVENTION: Novel Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-124
; CURRENT APPLICATION NUMBER: US/10/877,346
; CURRENT FILING DATE: 2004-06-25
; PRIOR APPLICATION NUMBER: US/09/964,956
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/235,631
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/235,633
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/235,808
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/236,064
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/236,065
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/236,066
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/236,135
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 60/237,434
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/238,321
; PRIOR FILING DATE: 2000-10-05
; Remaining Prior Application data removed - See file Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 127
; SOFTWARE: PatentIn Ver. 2.1
```

SEQ ID NO 43
LENGTH: 1963
TYPE: PRT
ORGANISM: Homo sapiens
US-10-877-346-43

Query Match 68.8%; Score 33; DB 9; Length 1963;
Best Local Similarity 66.7%; Pred. No. 3.7e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 YMLDQPEPT 9
Db 323 YFLTVQPEPT 331

RESULT 49
US-11-045-004-1264
Sequence 1264, Application US/11045004
Publication No. US20060078901A1
GENERAL INFORMATION:
APPLICANT: BUCHRIESER, CARMEN
APPLICANT: FRANGEUL, LIONEL
APPLICANT: COUVE, ELISABETH
APPLICANT: RUSNIOK, CHRISTOPHE
APPLICANT: ESJHI, HAFIDA
APPLICANT: DEHOUX, PIERRE
APPLICANT: DUSURGERT, OLIVIER
APPLICANT: CHETOUANI, FARID
APPLICANT: NEDJARI, HAFED
APPLICANT: GLASER, PHILIPPE
APPLICANT: KUNST, FRANCK
APPLICANT: COSSART, PASCAL
APPLICANT: DANIELS, JUSTIN
APPLICANT: GOEBEL, WERNER
APPLICANT: KREFT, JURGEN
APPLICANT: KUHN, MICHAEL
APPLICANT: NG, EVA
APPLICANT: VAZQUEZ-BOLAND, ANTONIO
APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
APPLICANT: GARRIDO-GARCIA, PATRICIA
APPLICANT: TIERREZ-MARTINEZ, ALBERTO
APPLICANT: AMEND, ALEXANDRA
APPLICANT: CHAKRABORTY, TRINAD
APPLICANT: DOMANN, EUGEN
APPLICANT: HAIN, THORSTEN
APPLICANT: BERCHE, PATRICK
APPLICANT: CHARBIT, ALAIN
APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
APPLICANT: BAQUERO, FERNANDO
APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
APPLICANT: GOMEZ-LOPEZ, NURIA
APPLICANT: MADUENIO, ENCARN
APPLICANT: PABLOS, BETRIZ DE
APPLICANT: WEHLAND, JURGEN
APPLICANT: KARST, UWE
APPLICANT: ENTIAN, KARL-DIETER
APPLICANT: HAUF, JORG
APPLICANT: ROSE, MATTHIAS
APPLICANT: VOSS, HAMUT
TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
FILE REFERENCE: 05394.0018-02
CURRENT APPLICATION NUMBER: US/11/045.004
PRIOR FILING DATE: 2005-01-28
PRIOR APPLICATION NUMBER: 10/637,657
PRIOR FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: 10/257,023
PRIOR FILING DATE: 2002-10-08
PRIOR APPLICATION NUMBER: PCT/FR01/01118
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: FR 00/04,629
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 2854

SOFTWARE: PatentIn version 3.3
SEQ ID NO 1264
LENGTH: 276
TYPE: PRT
ORGANISM: Listeria monocytogenes
US-11-045-004-1264

Query Match 66.7%; Score 32; DB 11; Length 276;
Best Local Similarity 85.7%; Pred. No. 66;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 MLDLQPE 8
Db 47 MLDLQPE 53

RESULT 50
US-11-045-004-391
Sequence 391, Application US/11045004
Publication No. US20060078901A1
GENERAL INFORMATION:
APPLICANT: BUCHRIESER, CARMEN
APPLICANT: FRANGEUL, LIONEL
APPLICANT: COUVE, ELISABETH
APPLICANT: RUSNIOK, CHRISTOPHE
APPLICANT: ESJHI, HAFIDA
APPLICANT: DEHOUX, PIERRE
APPLICANT: DUSURGERT, OLIVIER
APPLICANT: CHETOUANI, FARID
APPLICANT: NEDJARI, HAFED
APPLICANT: GLASER, PHILIPPE
APPLICANT: KUNST, FRANCK
APPLICANT: COSSART, PASCAL
APPLICANT: DANIELS, JUSTIN
APPLICANT: GOEBEL, WERNER
APPLICANT: KREFT, JURGEN
APPLICANT: KUHN, MICHAEL
APPLICANT: NG, EVA
APPLICANT: VAZQUEZ-BOLAND, ANTONIO
APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
APPLICANT: GARRIDO-GARCIA, PATRICIA
APPLICANT: TIERREZ-MARTINEZ, ALBERTO
APPLICANT: AMEND, ALEXANDRA
APPLICANT: CHAKRABORTY, TRINAD
APPLICANT: DOMANN, EUGEN
APPLICANT: HAIN, THORSTEN
APPLICANT: BERCHE, PATRICK
APPLICANT: CHARBIT, ALAIN
APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
APPLICANT: BAQUERO, FERNANDO
APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
APPLICANT: GOMEZ-LOPEZ, NURIA
APPLICANT: MADUENIO, ENCARN
APPLICANT: PABLOS, BETRIZ DE
APPLICANT: WEHLAND, JURGEN
APPLICANT: KARST, UWE
APPLICANT: ENTIAN, KARL-DIETER
APPLICANT: HAUF, JORG
APPLICANT: ROSE, MATTHIAS
APPLICANT: VOSS, HAMUT
TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
FILE REFERENCE: 05394.0018-02
CURRENT APPLICATION NUMBER: US/11/045.004
PRIOR FILING DATE: 2005-01-28
PRIOR APPLICATION NUMBER: 10/637,657
PRIOR FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: 10/257,023
PRIOR FILING DATE: 2002-10-08
PRIOR APPLICATION NUMBER: PCT/FR01/01118
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: FR 00/04,629
PRIOR FILING DATE: 2000-04-11

NUMBER OF SEQ ID NOS: 2854
SOFTWARE: Patentin version 3.3
SEQ ID NO: 391
LENGTH: 291
TYPE: PRT
ORGANISM: *Listeria monocytogenes*
US-11-045-004-391

Query Match 66.7%; Score 32; DB 11; Length 291;
Best Local Similarity 100.0%; Pred. No. 70;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 DLOPET 9
|||
Db 225 DLOPET 230

Search completed: May 5, 2006, 07:56:35
Job time : 10.4 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 04:48:55 ; Search time 20.7 Seconds
(without alignments)
35.946 Million cell updates/sec

Title: US-08-170-344-15

Perfect score: 46
Sequence: 1 MLDLPERTT 9Scoring table: BL0SUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/6_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/PTCURS_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfilest.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	46	100.0	9	1	US-08-217-188A-62
2	46	100.0	9	1	US-08-687-225B-62
3	46	100.0	9	2	US-08-667-725B-62
4	46	100.0	9	2	US-09-007-748-62
5	46	100.0	9	2	US-08-197-484-71
6	46	100.0	9	4	PCT-US95-02121-71
7	46	100.0	10	1	US-08-902-516-19
8	46	100.0	10	2	US-08-704-344-22
9	46	100.0	10	2	US-09-847-185-19
10	46	100.0	10	2	US-09-601-729-270
11	46	100.0	10	2	US-09-980-177A-19
12	46	100.0	18	2	US-08-075-541D-35
13	46	100.0	18	2	US-08-075-541D-45
14	46	100.0	20	1	US-08-934-915-46
15	46	100.0	20	2	US-08-075-541D-43
16	46	100.0	20	2	US-08-075-541D-44
17	46	100.0	20	2	US-09-980-177A-69
18	46	100.0	20	2	US-09-980-177A-70
19	46	100.0	23	2	US-09-980-523A-14
20	46	100.0	30	1	US-08-363-586-1
21	46	100.0	30	1	US-08-934-915-51
22	46	100.0	30	2	US-09-486-394-1
23	46	100.0	30	2	US-09-828-645-3
24	46	100.0	30	2	US-09-828-645-7
25	46	100.0	59	2	US-09-390-027-6
26	46	100.0	98	1	US-08-406-248-6
27	46	100.0	98	2	US-08-075-541D-42

28	46	100.0	98	2	US-09-382-616A-1	Sequence 1, Appli
29	46	100.0	98	2	US-08-944-368A-4	Sequence 4, Appli
30	46	100.0	98	2	US-09-820-76A-4	Sequence 4, Appli
31	46	100.0	98	2	US-09-613-303-8	Sequence 8, Appli
32	46	100.0	98	2	US-09-566-420-19	Sequence 19, Appli
33	46	100.0	98	2	US-09-986-118A-4	Sequence 4, Appli
34	46	100.0	98	2	US-09-728-466-1	Sequence 1, Appli
35	46	100.0	98	2	US-09-824-017-4	Sequence 4, Appli
36	46	100.0	98	2	US-10-267-311-8	Sequence 8, Appli
37	46	100.0	98	2	US-10-201-76A-19	Sequence 19, Appli
38	46	100.0	98	2	US-09-637-746-3	Sequence 3, Appli
39	46	100.0	98	2	US-09-501-097A-7	Sequence 7, Appli
40	46	100.0	98	2	US-09-980-523A-12	Sequence 12, Appli
41	46	100.0	121	2	US-09-613-303-12	Sequence 12, Appli
42	46	100.0	121	2	US-10-267-311-12	Sequence 12, Appli
43	46	100.0	172	2	US-08-860-165-12	Sequence 12, Appli
44	46	100.0	172	2	US-09-359-382-12	Sequence 12, Appli
45	46	100.0	185	2	US-09-462-993-2	Sequence 2, Appli
46	46	100.0	198	2	US-09-613-303-35	Sequence 35, Appli
47	46	100.0	198	2	US-10-267-311-35	Sequence 35, Appli
48	46	100.0	220	2	US-09-485-885-1	Sequence 1, Appli
49	46	100.0	220	2	US-09-485-885-8	Sequence 8, Appli
50	46	100.0	229	2	US-09-485-885-12	Sequence 12, Appli
51	46	100.0	253	1	US-08-459-818-20	Sequence 20, Appli
52	46	100.0	253	1	US-08-889-666-20	Sequence 20, Appli
53	46	100.0	253	1	US-08-465-078-20	Sequence 20, Appli
54	46	100.0	253	1	US-08-725-776-20	Sequence 20, Appli
55	46	100.0	253	1	US-08-488-062-20	Sequence 20, Appli
56	46	100.0	263	1	US-08-117-083-9	Sequence 9, Appli
57	46	100.0	263	1	US-08-860-165-10	Sequence 10, Appli
58	46	100.0	266	2	US-09-359-382-10	Sequence 10, Appli
59	46	100.0	266	2	US-09-359-382-10	Sequence 10, Appli
60	46	100.0	287	2	US-09-501-097A-25	Sequence 25, Appli
61	46	100.0	287	2	US-09-613-303-33	Sequence 33, Appli
62	46	100.0	295	2	US-10-267-311-33	Sequence 33, Appli
63	46	100.0	324	2	US-09-613-303-25	Sequence 25, Appli
64	46	100.0	324	2	US-10-267-311-25	Sequence 25, Appli
65	46	100.0	371	2	US-09-485-885-6	Sequence 6, Appli
66	46	100.0	371	2	US-09-485-885-14	Sequence 14, Appli
67	46	100.0	420	2	US-09-501-097A-22	Sequence 22, Appli
68	46	100.0	430	2	US-09-613-303-19	Sequence 19, Appli
69	46	100.0	493	2	US-10-267-311-19	Sequence 19, Appli
70	46	100.0	639	2	US-09-613-303-17	Sequence 17, Appli
71	46	100.0	639	2	US-10-267-311-17	Sequence 17, Appli
72	46	100.0	641	2	US-09-613-303-51	Sequence 51, Appli
73	46	100.0	641	2	US-10-267-311-51	Sequence 51, Appli
74	46	100.0	647	2	US-09-613-303-53	Sequence 53, Appli
75	46	100.0	647	2	US-10-267-311-53	Sequence 53, Appli
76	46	100.0	648	2	US-09-613-303-29	Sequence 29, Appli
77	46	100.0	648	2	US-10-267-311-29	Sequence 29, Appli
78	46	100.0	711	2	US-09-613-303-41	Sequence 41, Appli
79	46	100.0	711	2	US-10-267-311-41	Sequence 41, Appli
80	46	100.0	723	2	US-09-501-097A-20	Sequence 20, Appli
81	46	100.0	724	2	US-09-613-303-45	Sequence 45, Appli
82	46	100.0	724	2	US-10-267-311-45	Sequence 45, Appli
83	46	100.0	724	2	US-08-787-547-104	Sequence 104, App
84	46	100.0	9	1	US-08-948-378A-17	Sequence 17, Appli
85	46	100.0	9	2	US-09-169-425C-17	Sequence 17, Appli
86	46	100.0	9	2	US-08-197-484-66	Sequence 66, Appli
87	46	100.0	9	2	US-09-759-960-17	Sequence 17, Appli
88	46	100.0	9	2	US-10-365-908-3	Sequence 3, Appli
89	46	100.0	9	4	PCT-US95-02121-66	Sequence 66, Appli
90	46	100.0	20	1	US-08-934-915-152	Sequence 152, App
91	46	100.0	18	2	US-08-075-541D-34	Sequence 34, Appli
92	46	100.0	606	2	US-09-071-035-240	Sequence 240, App
93	46	100.0	606	2	US-10-206-576-240	Sequence 240, App
94	46	100.0	1223	2	US-09-071-035-236	Sequence 236, App
95	46	100.0	1223	2	US-10-206-576-236	Sequence 236, App
96	46	100.0	1301	2	US-09-071-035-234	Sequence 234, App
97	46	100.0	1301	2	US-09-071-035-238	Sequence 238, App
98	46	100.0	1301	2	US-09-071-035-242	Sequence 242, App
99	46	100.0	1301	2	US-10-206-576-234	Sequence 234, App
100	46	100.0	1301	2	US-10-206-576-238	Sequence 238, App

101	36	78.3	1301	2	US-10-206-576-242	Sequence 242, App	174	30	65.2	950	2	US-09-543-681A-5997	Sequence 5997, Ap
102	36	78.3	1306	2	US-09-134-000C-6670	Sequence 6670, Ap	175	30	65.2	956	2	US-09-962-955D-40	Sequence 40, Appl
103	36	78.3	2780	2	US-10-220-587-2	Sequence 2	176	30	65.2	1558	2	US-09-949-016-6803	Sequence 6803, Ap
104	34	73.9	356	2	US-08-178-257-5	Sequence 5, Appl1	177	30	65.2	1571	2	US-09-902-540-11083	Sequence 11083, A
105	34	73.9	468	2	US-09-602-787A-324	Sequence 324, App	178	30	65.2	1606	2	US-09-949-016-7271	Sequence 7271, Ap
106	34	73.9	589	1	US-08-756-317-5	Sequence 5, Appl1	179	30	65.2	3535	2	US-09-845-583A-2	Sequence 2, Appl1
107	34	73.9	693	2	US-09-248-796A-15575	Sequence 15575, A	180	30	65.2	3535	2	US-10-037-417-47	Sequence 47, Appl1
108	34	73.9	2777	2	US-10-220-587-4	Sequence 4, Appl1	181	29	65.0	3635	2	US-10-037-182-4	Sequence 4, Appl1
109	33	71.7	104	2	US-09-205-558-434	Sequence 434, App	182	29	63.0	84	2	US-09-270-767-33781	Sequence 33781, A
110	33	71.7	104	2	US-10-004-860-434	Sequence 434, App	183	29	63.0	84	2	US-09-270-767-48998	Sequence 48998, A
111	33	71.7	104	2	US-09-902-540-10922	Sequence 10922, A	184	29	63.0	86	2	US-09-583-116-4726	Sequence 4726, Ap
112	33	71.7	359	2	US-10-171-374-2	Sequence 2, Appl1	185	29	63.0	95	2	US-09-605-703B-1630	Sequence 1630, Ap
113	33	71.7	418	2	US-09-252-991A-31753	Sequence 31753, A	186	29	63.0	99	1	US-08-341-871A-26	Sequence 26, Appl
114	33	71.7	652	1	US-08-765-081-6	Sequence 6, Appl1	187	29	63.0	99	1	US-08-427-497E-31	Sequence 31, Appl
115	33	71.7	652	2	US-09-098-082-6	Sequence 6, Appl1	188	29	63.0	113	2	US-09-878-281A-204	Sequence 204, Appl
116	33	71.7	718	4	PCT-US95-06994-7	Sequence 7, Appl1	189	29	63.0	118	2	US-09-905-243-70	Sequence 70, Appl
117	32	69.6	341	2	US-09-252-991A-30646	Sequence 30646, A	190	29	63.0	123	2	US-09-248-796A-18357	Sequence 18357, A
118	32	69.6	418	2	US-09-489-039A-13585	Sequence 13585, A	191	29	63.0	128	2	US-09-905-243-69	Sequence 69, Appl
119	32	69.6	450	2	US-09-809-655A-28	Sequence 28, Appl	192	29	63.0	129	2	US-08-537-871A-29	Sequence 29, Appl
120	32	69.6	567	2	US-09-347-878-42	Sequence 42, Appl	193	29	63.0	155	2	US-09-902-540-9947	Sequence 9947, Ap
121	32	69.6	669	2	US-09-809-665A-105	Sequence 105, App	194	29	63.0	158	2	US-09-270-767-33197	Sequence 33197, A
122	32	69.6	1199	2	US-09-134-000C-5542	Sequence 5542, Ap	195	29	63.0	158	2	US-09-270-767-45464	Sequence 45464, A
123	32	69.6	1792	2	US-09-561-818A-4	Sequence 4, Appl1	196	29	63.0	164	2	US-09-540-236-3816	Sequence 3816, Ap
124	32	69.6	1800	2	US-09-561-818A-8	Sequence 8, Appl1	197	29	63.0	193	2	US-09-248-796A-16766	Sequence 16766, A
125	32	69.6	1816	2	US-09-561-818A-2	Sequence 2, Appl1	198	29	63.0	193	2	US-09-540-236-3327	Sequence 3127, Ap
126	32	69.6	1824	2	US-09-561-818A-6	Sequence 6, Appl1	199	29	63.0	201	2	US-09-134-000C-3349	Sequence 3949, Ap
127	31	67.4	9	2	US-10-365-908-26	Sequence 26, Appl	200	29	63.0	204	2	US-08-506-296B-58	Sequence 58, Appl
128	31	67.4	102	2	US-09-270-767-58664	Sequence 58664, A	201	29	63.0	270	2	US-09-198-452A-820	Sequence 820, App
129	31	67.4	155	2	US-09-540-236-2147	Sequence 2147, Ap	202	29	63.0	270	2	US-09-438-185A-772	Sequence 772, App
130	31	67.4	217	2	US-09-489-039A-7789	Sequence 7789, Ap	203	29	63.0	274	2	US-09-538-092-252	Sequence 252, App
131	31	67.4	217	2	US-09-543-681A-6961	Sequence 6961, Ap	204	29	63.0	294	2	US-09-605-703B-2768	Sequence 2768, Ap
132	31	67.4	315	2	US-09-248-796A-20757	Sequence 20757, A	205	29	63.0	304	2	US-08-506-296B-57	Sequence 57, Appl
133	31	67.4	384	2	US-10-104-047-2534	Sequence 2534, Ap	206	29	63.0	304	2	US-09-552-991A-32234	Sequence 32234, A
134	31	67.4	406	2	US-09-252-991A-19757	Sequence 19757, A	207	29	63.0	353	2	US-09-543-681A-7486	Sequence 7486, Ap
135	31	67.4	441	2	US-09-134-000C-6501	Sequence 6501, Ap	208	29	63.0	356	2	US-09-252-991A-27056	Sequence 27056, A
136	31	67.4	477	2	US-09-248-796A-20759	Sequence 20759, A	209	29	63.0	387	2	US-09-175-928-2	Sequence 2, Appl1
137	31	67.4	501	2	US-09-323-998E-55	Sequence 55, Appl	210	29	63.0	389	2	US-09-252-991A-33389	Sequence 3389, A
138	31	67.4	529	2	US-09-134-000C-4524	Sequence 4524, Appl	211	29	63.0	424	2	US-09-087-134-8	Sequence 8, Appl1
139	31	67.4	911	2	US-09-252-991A-19929	Sequence 19929, A	212	29	63.0	425	1	US-08-732-028-2	Sequence 2, Appl1
140	31	67.4	964	2	US-09-962-955D-39	Sequence 39, Appl	213	29	63.0	425	2	US-09-096-776B-8	Sequence 8, Appl1
141	31	67.4	984	1	US-08-673-789-9	Sequence 9, Appl1	214	29	63.0	425	2	US-09-183-228-2	Sequence 2, Appl1
142	31	67.4	984	1	US-08-449-645A-19	Sequence 19, Appl	215	29	63.0	425	2	US-09-923-922-8	Sequence 8, Appl1
143	31	67.4	984	1	US-08-702-367A-19	Sequence 19, Appl	216	29	63.0	425	2	US-09-586-305A-11	Sequence 11, Appl
144	31	67.4	984	4	PCT-US95-04681-19	Sequence 19, Appl	217	29	63.0	425	2	US-09-586-305A-13	Sequence 13, Appl
145	30	65.2	57	2	US-09-832-129-51	Sequence 51, Appl	218	29	63.0	427	2	US-08-506-296B-56	Sequence 56, Appl
146	30	65.2	132	2	US-09-252-991A-19534	Sequence 19534, A	219	29	63.0	431	2	US-09-586-305A-18	Sequence 18, Appl
147	30	65.2	181	2	US-09-513-999C-5797	Sequence 5797, Ap	220	29	63.0	436	2	US-08-840-767-6	Sequence 6, Appl1
148	30	65.2	194	2	US-09-902-540-9979	Sequence 9979, Ap	221	29	63.0	438	2	US-09-586-305A-11	Sequence 11, Appl
149	30	65.2	254	2	US-09-252-991A-17480	Sequence 17480, A	222	29	63.0	438	2	US-09-586-305A-12	Sequence 12, Appl
150	30	65.2	264	2	US-09-543-681A-6354	Sequence 6354, Ap	223	29	63.0	438	2	US-09-586-305A-13	Sequence 13, Appl
151	30	65.2	298	1	US-08-467-963C-8	Sequence 8, Appl1	224	29	63.0	438	2	US-09-586-305A-14	Sequence 14, Appl
152	30	65.2	298	1	US-08-838-189D-8	Sequence 8, Appl1	225	29	63.0	438	2	US-09-586-305A-15	Sequence 15, Appl
153	30	65.2	298	2	US-08-852-344D-8	Sequence 8, Appl1	226	29	63.0	438	2	US-09-586-305A-16	Sequence 16, Appl
154	30	65.2	298	2	US-08-344-639E-8	Sequence 8, Appl1	227	29	63.0	438	2	US-09-586-305A-17	Sequence 17, Appl
155	30	65.2	298	2	US-08-467-969A-8	Sequence 8, Appl1	228	29	63.0	438	2	US-09-586-305A-19	Sequence 19, Appl
156	30	65.2	298	2	US-08-467-961A-8	Sequence 8, Appl1	229	29	63.0	442	2	US-08-506-296B-70	Sequence 70, Appl
157	30	65.2	298	2	US-08-001-554A-8	Sequence 8, Appl1	230	29	63.0	451	2	US-09-949-016-7630	Sequence 7630, Ap
158	30	65.2	331	2	US-09-270-767-33457	Sequence 33457, A	231	29	63.0	466	1	US-07-923-739-2	Sequence 2, Appl1
159	30	65.2	331	2	US-09-270-767-48674	Sequence 48674, A	232	29	63.0	467	2	US-08-701-582D-2	Sequence 2, Appl1
160	30	65.2	375	2	US-09-134-000C-4818	Sequence 4818, Ap	233	29	63.0	467	2	US-08-701-582D-2	Sequence 2, Appl1
161	30	65.2	398	2	US-09-134-000C-5359	Sequence 5359, Ap	234	29	63.0	467	2	US-09-082-039A-2	Sequence 2, Appl1
162	30	65.2	461	2	US-10-104-047-2367	Sequence 2367, Ap	235	29	63.0	467	2	US-09-082-039A-15	Sequence 15, Appl
163	30	65.2	505	2	US-09-729-995-2	Sequence 2, Appl1	236	29	63.0	467	2	US-08-840-767-42	Sequence 42, Appl
164	30	65.2	505	2	US-09-729-995-4	Sequence 4, Appl1	237	29	63.0	467	2	US-08-840-767-50	Sequence 50, Appl
165	30	65.2	505	2	US-10-135-689-2	Sequence 2, Appl1	238	29	63.0	467	2	US-09-096-776B-7	Sequence 7, Appl1
166	30	65.2	505	2	US-10-135-689-4	Sequence 4, Appl1	239	29	63.0	467	2	US-09-087-134-2	Sequence 2, Appl1
167	30	65.2	505	2	US-10-690-617-2	Sequence 2, Appl1	240	29	63.0	467	2	US-09-087-134-5	Sequence 5, Appl1
168	30	65.2	505	2	US-10-690-617-4	Sequence 4, Appl1	241	29	63.0	467	2	US-09-552-138-2	Sequence 2, Appl1
169	30	65.2	536	2	US-09-600-099-5	Sequence 5, Appl1	242	29	63.0	467	2	US-09-552-138-15	Sequence 15, Appl
170	30	65.2	618	2	US-10-104-047-3605	Sequence 3605, Ap	243	29	63.0	467	2	US-08-580-031A-15	Sequence 15, Appl
171	30	65.2	887	1	US-08-337-494A-4	Sequence 4, Appl1	244	29	63.0	467	2	US-09-923-922-7	Sequence 7, Appl1
172	30	65.2	887	4	PCT-US95-13659-4	Sequence 4, Appl1	245	29	63.0	476	2	US-09-923-922-7	Sequence 7, Appl1
173	30	65.2	901	2	US-09-538-092-826	Sequence 826, App	246	29	63.0	476	2	US-09-902-540-14806	Sequence 14806, A

247	29	63.0	477	2	US-09-113-109-3	Sequence 3, Appl1	320	28	60.9	146	2	US-08-537-871A-37	Sequence 37, Appl1
248	29	63.0	477	2	US-09-521-109-3	Sequence 3, Appl1	321	28	60.9	163	2	US-09-902-540-16815	Sequence 16815, A
249	29	63.0	477	2	US-08-840-767-2	Sequence 2, Appl1	322	28	60.9	166	2	US-09-328-335-5520	Sequence 5250, Ap
250	29	63.0	477	2	US-09-562-332-3	Sequence 3, Appl1	323	28	60.9	174	2	US-09-270-767-33745	Sequence 33745, A
251	29	63.0	485	2	US-09-949-016-7633	Sequence 7633, Ap	324	28	60.9	174	2	US-09-270-767-48962	Sequence 48962, A
252	29	63.0	505	2	US-09-252-991A-29454	Sequence 29454, A	325	28	60.9	179	2	US-09-393-622B-6	Sequence 6, Appl1
253	29	63.0	511	2	US-09-489-039A-14257	Sequence 14257, A	326	28	60.9	187	2	US-09-540-233-3818	Sequence 3818, Ap
254	29	63.0	514	2	US-09-107-532A-4411	Sequence 4411, Ap	327	28	60.9	188	1	US-08-442-063A-39	Sequence 39, Appl1
255	29	63.0	523	2	US-09-489-039A-12885	Sequence 12885, A	328	28	60.9	198	2	US-09-981-087A-35	Sequence 25, Appl1
256	29	63.0	542	2	US-08-506-296B-69	Sequence 69, Appl1	329	28	60.9	198	2	US-09-978-382A-25	Sequence 25, Appl1
257	29	63.0	545	2	US-09-328-352-6221	Sequence 6221, Ap	330	28	60.9	198	2	US-09-978-740A-25	Sequence 25, Appl1
258	29	63.0	620	2	US-10-104-047-2045	Sequence 2045, Ap	331	28	60.9	198	2	US-09-978-728A-25	Sequence 25, Appl1
259	29	63.0	642	2	US-09-107-433-4944	Sequence 4944, Ap	332	28	60.9	198	2	US-09-978-730-25	Sequence 25, Appl1
260	29	63.0	653	1	US-08-765-081-7	Sequence 7, Appl1	333	28	60.9	211	2	US-09-602-787A-128	Sequence 128, App
261	29	63.0	663	2	US-09-098-082-7	Sequence 7, Appl1	334	28	60.9	217	1	US-08-874-832-1	Sequence 1, Appl1
262	29	63.0	665	2	US-08-506-296B-68	Sequence 68, Appl1	335	28	60.9	217	1	US-08-874-832-2	Sequence 2, Appl1
263	29	63.0	684	2	US-09-543-681A-4908	Sequence 4908, Ap	336	28	60.9	217	1	US-08-874-833-3	Sequence 3, Appl1
264	29	63.0	699	2	US-09-252-991A-17073	Sequence 17073, A	337	28	60.9	217	1	US-08-874-833-4	Sequence 4, Appl1
265	29	63.0	699	2	US-09-489-039A-8133	Sequence 8133, Ap	338	28	60.9	217	2	US-09-097-233-1	Sequence 1, Appl1
266	29	63.0	703	2	US-09-270-767-44732	Sequence 44732, A	339	28	60.9	217	2	US-09-097-233-2	Sequence 2, Appl1
267	29	63.0	703	4	PCT-US95-06994-9	Sequence 9, Appl1	340	28	60.9	217	2	US-09-097-233-3	Sequence 3, Appl1
268	29	63.0	709	2	US-09-583-110-5113	Sequence 5113, Ap	341	28	60.9	217	2	US-09-097-233-4	Sequence 4, Appl1
269	29	63.0	718	2	US-09-417-197-75	Sequence 75, Appl1	342	28	60.9	231	2	US-09-543-681A-6221	Sequence 6221, Ap
270	29	63.0	719	2	US-09-417-197-51	Sequence 51, Appl1	343	28	60.9	236	1	US-08-442-063A-42	Sequence 42, Appl1
271	29	63.0	758	2	US-09-198-452A-996	Sequence 96, App	344	28	60.9	237	1	US-08-469-537A-85	Sequence 85, Appl1
272	29	63.0	758	2	US-09-438-185A-926	Sequence 926, App	345	28	60.9	237	2	US-09-149-476-494	Sequence 494, App
273	29	63.0	761	2	US-09-328-352-5942	Sequence 5942, Ap	346	28	60.9	239	2	US-09-902-540-12874	Sequence 12874, A
274	29	63.0	854	1	US-09-902-540-15925	Sequence 15925, A	347	28	60.9	243	2	US-09-270-767-32897	Sequence 32897, A
275	29	63.0	903	2	US-09-252-991A-24977	Sequence 24977, A	348	28	60.9	243	2	US-09-543-681A-48114	Sequence 48114, A
276	29	63.0	970	1	US-08-375-709-7	Sequence 7, Appl1	349	28	60.9	247	2	US-09-543-681A-48108	Sequence 4208, Ap
277	29	63.0	970	1	US-08-752-929-7	Sequence 7, Appl1	350	28	60.9	252	2	US-07-857-224B-26	Sequence 26, Appl1
278	29	63.0	970	2	US-09-090-793-5	Sequence 5, Appl1	351	28	60.9	252	2	US-09-583-110-3515	Sequence 3515, Ap
279	29	63.0	970	2	US-09-231-899-5	Sequence 5, Appl1	352	28	60.9	256	2	US-08-107-433-4151	Sequence 4151, Ap
280	29	63.0	1075	1	US-08-993-828-19	Sequence 19, Appl1	353	28	60.9	259	2	US-08-871-572B-6	Sequence 6, Appl1
281	29	63.0	1076	2	US-09-949-016-6610	Sequence 6610, Ap	354	28	60.9	266	2	US-09-252-991A-19949	Sequence 19949, A
282	29	63.0	1100	2	US-09-949-016-7524	Sequence 7524, Ap	355	28	60.9	282	1	US-08-442-063A-45	Sequence 45, Appl1
283	29	63.0	1181	2	US-09-252-991A-16480	Sequence 16480, A	356	28	60.9	284	2	US-09-902-540-10431	Sequence 10431, A
284	29	63.0	1253	2	US-08-506-296B-14	Sequence 14, Appl1	357	28	60.9	289	2	US-09-902-540-15857	Sequence 15857, A
285	29	63.0	1308	2	US-09-134-000C-6588	Sequence 6588, Ap	358	28	60.9	307	1	US-08-442-063A-48	Sequence 48, Appl1
286	29	63.0	4302	2	US-08-558-136-5	Sequence 5, Appl1	359	28	60.9	312	1	US-10-104-047-2822	Sequence 2822, Ap
287	29	63.0	4302	2	US-09-052-469-8	Sequence 8, Appl1	360	28	60.9	314	2	US-09-188-930-193	Sequence 193, App
288	29	63.0	4302	2	US-08-422-582-8	Sequence 8, Appl1	361	28	60.9	314	2	US-09-312-283C-193	Sequence 193, App
289	29	63.0	4302	2	US-09-052-262-8	Sequence 8, Appl1	362	28	60.9	316	2	US-09-188-930-337	Sequence 337, App
290	29	63.0	4303	1	US-08-460-751-2	Sequence 2, Appl1	363	28	60.9	316	2	US-09-312-283C-337	Sequence 337, App
291	29	63.0	4303	2	US-09-479-67A-2	Sequence 2, Appl1	364	28	60.9	319	2	US-09-771-161A-118	Sequence 118, App
292	29	63.0	4339	2	US-09-655-160-2	Sequence 2, Appl1	365	28	60.9	333	1	US-08-442-063A-27	Sequence 27, Appl1
293	29	63.0	4339	2	US-09-052-469-6	Sequence 6, Appl1	366	28	60.9	342	1	US-08-272-918-2	Sequence 2, Appl1
294	29	63.0	4339	2	US-08-422-582-6	Sequence 6, Appl1	367	28	60.9	342	1	US-08-619-918-2	Sequence 2, Appl1
295	29	63.0	4339	2	US-09-052-262-6	Sequence 6, Appl1	368	28	60.9	342	4	PCT-US95-08542-2	Sequence 2, Appl1
296	29	63.0	10182	2	US-09-134-001C-3159	Sequence 3159, Ap	369	28	60.9	350	1	US-08-415-751-43	Sequence 43, Appl1
297	28	60.9	48	4	PCT-US93-11110-2	Sequence 100, App	370	28	60.9	353	6	5340934-4	Patent No. 5340934
298	28	60.9	48	4	PCT-US93-11110-4	Sequence 2, Appl1	371	28	60.9	355	1	US-08-458-555-2	Sequence 2, Appl1
299	28	60.9	65	2	US-09-248-796A-26015	Sequence 4, Appl1	372	28	60.9	357	2	US-09-404-296B-10	Sequence 10, Appl1
300	28	60.9	73	2	US-09-270-767-38044	Sequence 26015, A	373	28	60.9	359	1	US-08-303-238-4	Sequence 4, Appl1
301	28	60.9	73	2	US-09-270-767-38044	Sequence 38044, A	374	28	60.9	359	2	US-08-458-834-4	Sequence 4, Appl1
302	28	60.9	73	2	US-09-270-767-53261	Sequence 53261, A	375	28	60.9	359	2	US-09-538-092-868	Sequence 868, App
303	28	60.9	77	2	US-09-100-802-3	Sequence 3, Appl1	376	28	60.9	359	2	US-09-548-016-6143	Sequence 6143, Ap
304	28	60.9	90	2	US-09-513-999C-4167	Sequence 4167, Ap	377	28	60.9	360	2	US-09-949-016-7925	Sequence 7925, Ap
305	28	60.9	96	1	US-08-442-063A-33	Sequence 33, Appl1	378	28	60.9	366	2	US-09-248-796A-17059	Sequence 17059, A
306	28	60.9	99	1	US-08-278-089A-30	Sequence 30, Appl1	379	28	60.9	370	2	US-08-857-076-107	Sequence 107, App
307	28	60.9	99	1	US-08-838-957A-29	Sequence 29, Appl1	380	28	60.9	370	2	US-09-205-658-107	Sequence 107, App
308	28	60.9	102	1	US-08-710-749-21	Sequence 21, Appl1	381	28	60.9	375	2	US-09-252-991A-28105	Sequence 28105, A
309	28	60.9	102	2	US-09-147-875A-18	Sequence 18, Appl1	382	28	60.9	377	1	US-07-863-169A-1	Sequence 1, Appl1
310	28	60.9	105	2	US-09-134-000C-5204	Sequence 5204, Ap	383	28	60.9	377	1	US-08-429-964-5	Sequence 5, Appl1
311	28	60.9	110	2	US-09-513-999C-4911	Sequence 4911, Ap	384	28	60.9	377	2	US-07-935-087-1	Sequence 1, Appl1
312	28	60.9	113	2	US-09-553-949-8	Sequence 8, Appl1	385	28	60.9	377	4	PCT-US93-08062-1	Sequence 1, Appl1
313	28	60.9	113	2	US-09-530-139-59	Sequence 59, Appl1	386	28	60.9	379	1	US-07-863-169A-5	Sequence 5, Appl1
314	28	60.9	125	2	US-08-537-871A-20	Sequence 20, Appl1	387	28	60.9	379	1	US-08-424-268-8	Sequence 8, Appl1
315	28	60.9	125	2	US-08-537-871A-28	Sequence 28, Appl1	388	28	60.9	379	1	US-08-429-964-5	Sequence 5, Appl1
316	28	60.9	131	1	US-09-949-016-9319	Sequence 9319, Ap	389	28	60.9	379	2	US-07-935-087-5	Sequence 5, Appl1
317	28	60.9	141	1	US-08-442-063A-36	Sequence 36, Appl1	390	28	60.9	379	2	US-09-538-092-1149	Sequence 1149, Ap
318	28	60.9	141	2	US-10-007-761-2	Sequence 2, Appl1	391	28	60.9	379	4	PCT-US93-08062-5	Sequence 5, Appl1
319	28	60.9	145	2	US-09-270-767-42404	Sequence 42404, A	392	28	60.9	379	4	PCT-US93-10442-8	Sequence 8, Appl1

393	28	60.9	392	2	US-09-491-577-90	Sequence 90, Appl
394	28	60.9	395	2	US-09-252-991A-20189	Sequence 20189, A
395	28	60.9	403	2	US-09-270-767-46690	Sequence 46690, A
396	28	60.9	406	2	US-09-538-092-143	Sequence 143, App
397	28	60.9	439	2	US-08-311-731A-178	Sequence 178, Appl
398	28	60.9	443	2	US-09-902-540-16800	Sequence 16800, A
399	28	60.9	453	2	US-09-013-881-5	Sequence 5, Appli
400	28	60.9	453	2	US-09-612-473-5	Sequence 5, Appli
401	28	60.9	455	2	US-09-240-639-10	Sequence 10, Appl
402	28	60.9	455	2	US-09-908-510A-10	Sequence 10, Appl
403	28	60.9	455	2	US-09-905-744B-10	Sequence 10, Appl
404	28	60.9	455	2	US-10-107-660-10	Sequence 10, Appl
405	28	60.9	455	2	US-10-107-576-10	Sequence 10, Appl
406	28	60.9	455	2	US-09-905-732B-10	Sequence 10, Appl
407	28	60.9	455	2	US-09-905-743B-10	Sequence 10, Appl
408	28	60.9	455	2	US-09-905-589-10	Sequence 10, Appl
409	28	60.9	455	2	US-10-108-171A-10	Sequence 10, Appl
410	28	60.9	476	2	US-09-252-991A-31416	Sequence 31416, A
411	28	60.9	478	2	US-09-252-991A-31866	Sequence 31866, A
412	28	60.9	485	2	US-09-489-039A-10167	Sequence 10167, A
413	28	60.9	489	2	US-08-190-204-2	Sequence 2, Appli
414	28	60.9	489	2	US-08-190-204-2	Sequence 2, Appli
415	28	60.9	489	6	PCT-US93-11110-1	Patent No. 5221789
416	28	60.9	499	2	US-09-336-643A-8	Sequence 8, Appli
417	28	60.9	503	2	US-09-949-016-11437	Sequence 11437, A
418	28	60.9	508	2	US-09-489-039A-7887	Sequence 7887, Ap
419	28	60.9	508	2	US-09-489-039A-7887	Sequence 7887, Ap
420	28	60.9	524	2	US-09-949-016-10320	Sequence 10320, A
421	28	60.9	530	1	US-08-187-793-4	Sequence 4, Appli
422	28	60.9	539	1	US-08-818-024-4	Sequence 4, Appli
423	28	60.9	539	2	US-09-334-775A-4	Sequence 6, Appli
424	28	60.9	539	2	US-08-789-275-6	Sequence 2140, Ap
425	28	60.9	543	2	US-10-104-047-2140	Sequence 519, App
426	28	60.9	545	2	US-09-198-452A-519	Sequence 483, App
427	28	60.9	545	2	US-09-438-185A-483	Sequence 483, App
428	28	60.9	552	2	US-09-107-532A-4865	Sequence 4865, Ap
429	28	60.9	552	2	US-09-252-991A-30324	Sequence 30324, A
430	28	60.9	553	2	US-09-270-767-4361	Sequence 42396, A
431	28	60.9	585	2	US-09-270-767-42396	Sequence 42396, A
432	28	60.9	588	2	US-09-949-016-10547	Sequence 10547, A
433	28	60.9	676	2	US-09-313-930-2	Sequence 209, App
434	28	60.9	676	2	US-09-771-161A-209	Sequence 11575, A
435	28	60.9	684	2	US-09-949-016-11575	Sequence 28808, A
436	28	60.9	694	2	US-09-252-991A-28808	Sequence 10624, A
437	28	60.9	694	2	US-09-902-540-10624	Sequence 10624, A
438	28	60.9	757	2	US-09-252-991A-32541	Sequence 32541, A
439	28	60.9	819	1	US-08-424-268-20	Sequence 20, Appl
440	28	60.9	819	4	PCT-US93-10442-20	Sequence 20, Appl
441	28	60.9	848	2	US-09-787-443-44	Sequence 44, Appl
442	28	60.9	944	2	US-09-270-767-46843	Sequence 46843, A
443	28	60.9	953	2	US-09-252-991A-27230	Sequence 27230, A
444	28	60.9	976	1	US-08-449-645A-18	Sequence 18, Appl
445	28	60.9	976	1	US-08-702-367A-18	Sequence 18, Appl
446	28	60.9	976	2	US-09-949-016-6499	Sequence 6499, Ap
447	28	60.9	976	4	PCT-US95-04681-18	Sequence 18, Appl
448	28	60.9	977	1	US-08-673-789-8	Sequence 8, Appli
449	28	60.9	1013	2	US-09-949-016-7991	Sequence 7991, Ap
450	28	60.9	1036	2	US-09-252-991A-27075	Sequence 27075, A
451	28	60.9	1060	2	US-09-902-540-9866	Sequence 9866, Ap
452	28	60.9	1107	1	US-08-463-537A-96	Sequence 96, Appl
453	28	60.9	1107	1	US-10-153-469A-11	Sequence 11, Appl
454	28	60.9	1107	1	US-07-934-393B-2	Sequence 2, Appli
455	28	60.9	1118	1	US-08-278-089A-2	Sequence 2, Appli
456	28	60.9	1118	1	US-08-838-957A-2	Sequence 2, Appli
457	28	60.9	1118	1	US-08-278-089A-6	Sequence 6, Appli
458	28	60.9	1122	1	US-08-838-957A-6	Sequence 6, Appli
459	28	60.9	1122	1	US-10-104-047-2933	Sequence 2933, Ap
460	28	60.9	1196	2	US-09-538-092-12	Sequence 12, Appl
461	28	60.9	1244	2	US-09-107-433-4399	Sequence 4399, Ap
462	28	60.9	1290	2	US-09-583-110-5037	Sequence 5037, Ap
463	28	60.9	1303	2	US-08-249-687C-2	Sequence 2, Appli
464	28	60.9	1367	1	US-08-625-819-2	Sequence 2, Appli
465	28	60.9	1367	1	US-08-625-819-2	Sequence 2, Appli
466	28	60.9	1367	2	US-08-746-559A-2	Sequence 2, Appli
467	28	60.9	1367	2	US-09-343-551-1	Sequence 2, Appli
468	28	60.9	1367	2	US-09-949-001-18	Sequence 18, Appl
469	28	60.9	1377	2	US-09-949-001-21	Sequence 21, Appl
470	28	60.9	1388	2	US-10-153-469A-10	Sequence 10, Appl
471	28	60.9	1388	2	US-10-104-889-10	Sequence 10, Appl
472	28	60.9	1658	1	US-08-609-049A-13	Sequence 13, Appl
473	28	60.9	1658	2	US-09-170-996-13	Sequence 17, Appl
474	28	60.9	1686	2	US-09-355-160D-2	Sequence 2, Appli
475	28	60.9	1686	2	US-10-092-219-2	Sequence 2, Appli
476	28	60.9	1726	1	US-08-609-099A-30	Sequence 30, Appl
477	28	60.9	1726	2	US-09-170-996-10	Sequence 10, Appl
478	28	60.9	1792	2	US-09-561-818A-12	Sequence 12, Appl
479	28	60.9	1816	2	US-09-561-818A-10	Sequence 10, Appl
480	28	60.9	3472	2	US-09-408-020-4	Sequence 4, Appli
481	28	60.9	3829	2	US-09-693-205A-2	Sequence 2, Appli
482	28	60.9	3829	2	US-09-693-205A-16	Sequence 16, Appl
483	28	60.9	3829	2	US-09-693-205A-16	Sequence 4, Appli
484	28	60.9	3830	2	US-08-159-339A-81	Sequence 81, Appl
485	27	58.7	10	2	US-10-365-908-2	Sequence 2, Appli
486	27	58.7	10	2	US-10-365-908-57	Sequence 57, Appl
487	27	58.7	15	2	US-10-144-929-357	Sequence 257, App
488	27	58.7	15	2	US-09-000-034-50	Sequence 50, Appl
489	27	58.7	19	2	US-10-011-749-50	Sequence 50, Appl
490	27	58.7	60	2	US-09-248-796A-27346	Sequence 27346, A
491	27	58.7	64	2	US-09-583-110-4690	Sequence 4690, Ap
492	27	58.7	78	2	US-09-513-999C-4349	Sequence 4349, Ap
493	27	58.7	91	2	US-09-107-532A-3719	Sequence 3719, Ap
494	27	58.7	93	2	US-09-489-039A-11103	Sequence 11103, A
495	27	58.7	98	2	US-09-270-767-36028	Sequence 36028, A
496	27	58.7	98	2	US-09-270-767-51245	Sequence 51245, A
497	27	58.7	101	2	US-09-513-999C-8046	Sequence 8046, Ap
498	27	58.7	102	2	US-09-248-796A-17550	Sequence 17550, A
499	27	58.7	107	1	US-08-446-363-5	Sequence 5, Appli
500	27	58.7	108	2	US-09-810-230A-38	Sequence 38, Appl
501	27	58.7	108	2	US-09-902-540-13369	Sequence 13369, A
502	27	58.7	110	2	US-08-256-568B-92	Sequence 92, Appl
503	27	58.7	113	1	US-09-038-365B-92	Sequence 92, Appl
504	27	58.7	113	2	US-09-378-900A-92	Sequence 92, Appl
505	27	58.7	113	2	US-09-899-044-92	Sequence 92, Appl
506	27	58.7	113	2	US-09-878-281A-160	Sequence 160, Appl
507	27	58.7	113	2	US-09-899-302-92	Sequence 92, Appl
508	27	58.7	113	2	US-09-899-082B-92	Sequence 92, Appl
509	27	58.7	120	1	US-08-249-013-9	Sequence 9, Appli
510	27	58.7	120	1	US-08-886-863-9	Sequence 9, Appli
511	27	58.7	120	1	US-09-175-229-9	Sequence 9, Appli
512	27	58.7	120	4	PCT-US95-06764-9	Sequence 34736, A
513	27	58.7	121	2	US-09-270-767-34736	Sequence 34736, A
514	27	58.7	121	2	US-09-270-767-49953	Sequence 49953, A
515	27	58.7	122	2	US-09-732-210-969	Sequence 969, App
516	27	58.7	122	2	US-09-732-210-974	Sequence 974, App
517	27	58.7	123	2	US-09-732-210-974	Sequence 209, App
518	27	58.7	123	2	US-09-732-210-974	Sequence 8008, Ap
519	27	58.7	123	2	US-09-513-999C-8008	Sequence 92, Appl
520	27	58.7	127	2	US-08-836-561-92	Sequence 98, Appl
521	27	58.7	127	2	US-08-836-561-98	Sequence 98, Appl
522	27	58.7	127	2	US-08-836-561-103	Sequence 103, Appl
523	27	58.7	127	2	US-09-434-122-92	Sequence 92, Appl
524	27	58.7	127	2	US-09-434-122-98	Sequence 98, Appl
525	27	58.7	127	2	US-09-434-122-103	Sequence 103, Appl
526	27	58.7	127	2	US-09-530-139-12	Sequence 24, Appl
527	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
528	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
529	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
530	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
531	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
532	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
533	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
534	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
535	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
536	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
537	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl
538	27	58.7	127	2	US-09-530-139-37	Sequence 37, Appl

539	27	58.7	167	2	US-09-134-001C-2867	Sequence 2867, Ap	612	27	58.7	326	2	US-09-252-991A-32297	Sequence 32297, A
540	27	58.7	168	2	US-08-444-628-9	Sequence 9, Appl1	613	27	58.7	330	2	US-09-252-991A-18388	Sequence 18388, A
541	27	58.7	168	2	US-08-357-820-9	Sequence 9, Appl1	614	27	58.7	331	2	US-09-453-956-3	Sequence 3, Appl1
542	27	58.7	170	1	US-08-313-681A-2	Sequence 2, Appl1	615	27	58.7	331	2	US-10-223-371B-3	Sequence 3, Appl1
543	27	58.7	170	2	US-09-322-911-2	Sequence 32, Appl1	616	27	58.7	336	2	US-09-107-532A-5830	Sequence 5830, Ap
544	27	58.7	170	2	US-09-917-340-32	Sequence 1, Appl1	617	27	58.7	337	1	US-08-440-856A-3	Sequence 3, Appl1
545	27	58.7	171	1	US-08-303-270-1	Sequence 1, Appl1	618	27	58.7	343	2	US-09-801-861-2	Sequence 2, Appl1
546	27	58.7	172	2	US-09-248-796A-19469	Sequence 19469, A	619	27	58.7	343	2	US-10-224-562-2	Sequence 2, Appl1
547	27	58.7	177	2	US-09-134-001C-4696	Sequence 4696, Ap	620	27	58.7	343	2	US-10-786-065-2	Sequence 31357, A
548	27	58.7	178	2	US-09-107-532A-6775	Sequence 6775, Ap	621	27	58.7	344	2	US-09-270-767-55423	Sequence 45423, A
549	27	58.7	180	2	US-09-214-307A-2	Sequence 2, Appl1	622	27	58.7	357	2	US-09-328-352-8231	Sequence 8231, Ap
550	27	58.7	180	2	US-10-054-968-2	Sequence 2, Appl1	623	27	58.7	362	2	US-09-902-540-15611	Sequence 15611, A
551	27	58.7	183	2	US-09-248-796A-18369	Sequence 18369, A	624	27	58.7	363	2	US-09-830-433A-18337	Sequence 4, Appl1
552	27	58.7	184	2	US-09-605-703B-2922	Sequence 2922, Ap	625	27	58.7	365	2	US-09-248-796A-18337	Sequence 18337, A
553	27	58.7	190	2	US-08-270-767-32250	Sequence 32250, A	626	27	58.7	369	2	US-09-285-585C-122	Sequence 122, Ap
554	27	58.7	200	1	US-08-187-829-3	Sequence 3, Appl1	627	27	58.7	371	2	US-09-248-796A-18878	Sequence 18878, A
555	27	58.7	200	2	US-09-021-230-3	Sequence 3, Appl1	628	27	58.7	375	2	US-09-940-921B-9	Sequence 9, Appl1
556	27	58.7	200	2	US-09-572-046-3	Sequence 3, Appl1	629	27	58.7	385	2	US-08-875-082-2	Sequence 18228, A
557	27	58.7	200	2	US-09-972-137-3	Sequence 3, Appl1	630	27	58.7	387	2	US-10-138-701-57	Sequence 57, Appl1
558	27	58.7	201	2	US-09-987-418A-2	Sequence 2, Appl1	631	27	58.7	388	2	US-09-940-921B-7	Sequence 7, Appl1
559	27	58.7	201	2	US-09-343-062-2	Sequence 2, Appl1	632	27	58.7	396	2	US-09-489-039A-12215	Sequence 12215, A
560	27	58.7	201	2	US-10-104-047-3518	Sequence 3518, Ap	633	27	58.7	398	2	US-09-940-921B-9	Sequence 9, Appl1
561	27	58.7	205	2	US-09-902-540-10265	Sequence 10265, A	634	27	58.7	398	2	US-09-489-039A-12215	Sequence 9, Appl1
562	27	58.7	208	2	US-09-064-414-6	Sequence 6, Appl1	635	27	58.7	399	2	US-09-940-921B-9	Sequence 9, Appl1
563	27	58.7	208	2	US-09-248-796A-19013	Sequence 19013, A	636	27	58.7	399	2	US-09-328-352-7632	Sequence 7632, Ap
564	27	58.7	215	2	US-09-248-796A-27992	Sequence 27992, A	637	27	58.7	404	2	US-09-248-796A-18878	Sequence 42461, A
565	27	58.7	218	2	US-09-248-796A-25885	Sequence 25885, A	638	27	58.7	408	2	US-09-270-767-42461	Sequence 13, Appl1
566	27	58.7	226	2	US-09-248-796A-14924	Sequence 14924, A	639	27	58.7	414	2	US-09-858-664A-13	Sequence 14, Appl1
567	27	58.7	227	2	US-09-248-796A-17223	Sequence 17223, A	640	27	58.7	414	2	US-10-274-978-14	Sequence 14, Appl1
568	27	58.7	227	6	5498499-2	Parent No. 5498499	641	27	58.7	414	2	US-10-697-263-14	Sequence 14, Appl1
569	27	58.7	235	2	US-09-252-991A-30133	Sequence 30133, A	642	27	58.7	415	2	US-09-252-991A-33056	Sequence 33056, A
570	27	58.7	235	2	US-09-513-999C-5671	Sequence 5671, Ap	643	27	58.7	418	2	US-09-902-540-15726	Sequence 15726, A
571	27	58.7	236	2	US-09-134-001C-3026	Sequence 3026, Ap	644	27	58.7	424	2	US-09-265-855C-149	Sequence 149, App
572	27	58.7	248	2	US-09-758-759-75	Sequence 75, Appl1	645	27	58.7	425	2	US-09-902-540-15834	Sequence 60705, A
573	27	58.7	256	2	US-09-248-796A-14333	Sequence 14333, A	646	27	58.7	428	2	US-09-270-767-070705	Sequence 5, Appl1
574	27	58.7	256	2	US-09-548-473B-13	Sequence 13, Appl1	647	27	58.7	435	2	US-09-801-861-5	Sequence 5, Appl1
575	27	58.7	257	2	US-09-438-185A-828	Sequence 828, App	648	27	58.7	435	2	US-10-224-562-5	Sequence 5, Appl1
576	27	58.7	258	2	US-09-548-473B-12	Sequence 12, Appl1	649	27	58.7	435	2	US-10-766-065-5	Sequence 4168, Ap
577	27	58.7	260	1	US-07-857-224B-23	Sequence 23, Appl1	650	27	58.7	439	2	US-09-107-532A-4168	Sequence 10095, A
578	27	58.7	261	1	US-07-857-224B-22	Sequence 22, Appl1	651	27	58.7	440	2	US-09-489-039A-10055	Sequence 42566, A
579	27	58.7	269	2	US-09-605-703B-642	Sequence 642, App	652	27	58.7	451	2	US-08-624-125-20	Sequence 20, Appl1
580	27	58.7	269	2	US-09-605-703B-644	Sequence 644, App	653	27	58.7	456	1	US-08-937-155-20	Sequence 60881, A
581	27	58.7	271	2	US-09-270-767-32607	Sequence 32607, A	654	27	58.7	456	2	US-09-270-767-60881	Sequence 17275, A
582	27	58.7	271	2	US-09-270-767-47824	Sequence 47824, A	655	27	58.7	460	2	US-09-252-991A-17275	Sequence 7900, Ap
583	27	58.7	273	2	US-09-134-000C-4763	Sequence 4763, Ap	656	27	58.7	464	2	US-09-328-352-7900	Sequence 24, Appl1
584	27	58.7	273	2	US-09-248-796A-14521	Sequence 14521, A	657	27	58.7	465	2	US-09-107-532A-1519	Sequence 5119, Ap
585	27	58.7	274	2	US-09-858-664A-14	Sequence 14, Appl1	658	27	58.7	465	2	US-10-011-749-24	Sequence 1642, Ap
586	27	58.7	274	2	US-09-543-681A-5366	Sequence 5366, Ap	659	27	58.7	470	2	US-09-605-703B-1642	Sequence 14817, A
587	27	58.7	274	2	US-10-274-978-15	Sequence 15, Appl1	660	27	58.7	473	2	US-09-902-540-14917	Sequence 19010, A
588	27	58.7	274	2	US-09-186-276B-34	Sequence 34, Appl1	661	27	58.7	476	2	US-09-248-796A-19010	Sequence 15886, A
589	27	58.7	277	2	US-08-842-445-34	Sequence 34, Appl1	662	27	58.7	481	2	US-09-902-540-15686	Sequence 57, Appl1
590	27	58.7	277	2	US-09-186-188B-14	Sequence 14, Appl1	663	27	58.7	488	2	US-09-323-998B-58	Sequence 58, Appl1
591	27	58.7	277	2	US-09-186-188B-14	Sequence 34, Appl1	664	27	58.7	498	2	US-09-323-998B-58	Sequence 59, Appl1
592	27	58.7	278	2	US-09-902-540-19008	Sequence 19008, A	665	27	58.7	500	2	US-09-323-998B-58	Sequence 59, Appl1
593	27	58.7	281	2	US-09-902-540-15871	Sequence 15871, A	666	27	58.7	500	2	US-09-323-998B-58	Sequence 59, Appl1
594	27	58.7	284	2	US-09-107-532A-6030	Sequence 6030, Ap	667	27	58.7	502	2	US-09-323-998B-58	Sequence 56, Appl1
595	27	58.7	284	2	US-09-674-741-12	Sequence 12, Appl1	668	27	58.7	508	2	US-09-858-664A-18	Sequence 18, Appl1
596	27	58.7	286	2	US-10-379-010-12	Sequence 12, Appl1	669	27	58.7	508	2	US-10-274-978-19	Sequence 19, Appl1
597	27	58.7	289	2	US-10-151-832-6	Sequence 6, Appl1	670	27	58.7	518	2	US-10-697-263-19	Sequence 19, Appl1
598	27	58.7	289	2	US-10-151-832-8	Sequence 8, Appl1	671	27	58.7	518	2	US-09-252-991A-33063	Sequence 33063, A
599	27	58.7	293	2	US-09-489-039A-14316	Sequence 14316, A	672	27	58.7	520	2	US-09-940-016-8026	Sequence 8026, Ap
600	27	58.7	293	2	US-09-949-016-10110	Sequence 10110, A	673	27	58.7	525	2	US-09-248-796A-19906	Sequence 19906, A
601	27	58.7	294	2	US-09-674-741-17	Sequence 17, Appl1	674	27	58.7	527	2	US-09-543-681A-6795	Sequence 6795, Ap
602	27	58.7	294	2	US-10-402-818-7	Sequence 17, Appl1	675	27	58.7	529	2	US-09-252-991A-23395	Sequence 23395, A
603	27	58.7	294	2	US-10-379-010-17	Sequence 17, Appl1	676	27	58.7	533	2	US-09-107-532A-4539	Sequence 4539, Ap
604	27	58.7	294	2	US-10-151-832-7	Sequence 7, Appl1	677	27	58.7	534	2	US-09-270-767-45211	Sequence 45211, A
605	27	58.7	298	2	US-09-858-664A-17	Sequence 17, Appl1	678	27	58.7	539	2	US-09-800-110-16	Sequence 16, Appl1
606	27	58.7	298	2	US-10-274-978-18	Sequence 18, Appl1	679	27	58.7	539	2	US-10-082-894-3	Sequence 3, Appl1
607	27	58.7	298	2	US-10-697-263-18	Sequence 18, Appl1	680	27	58.7	543	2	US-09-107-532A-7235	Sequence 7235, Ap
608	27	58.7	303	2	US-09-674-741-8	Sequence 8, Appl1	681	27	58.7	546	2	US-09-252-991A-23231	Sequence 23231, A
609	27	58.7	303	2	US-10-379-010-8	Sequence 8, Appl1	682	27	58.7	548	2	US-09-207-388-23	Sequence 23, Appl1
610	27	58.7	315	2	US-09-248-796A-20438	Sequence 20438, A	683	27	58.7	565	2	US-09-328-352-4920	Sequence 4920, Ap
611	27	58.7	320	2	US-09-252-991A-30676	Sequence 30676, A	684	27	58.7				

685	27	58.7	565	2	US-09-489-039A-10676	Sequence 10676, A	758	27	58.7	770	2	US-09-489-039A-7872	Sequence 7872, Ap
686	27	58.7	568	2	US-09-207-388-22	Sequence 22, Appl	759	27	58.7	792	2	US-09-902-540-11813	Sequence 11813, A
687	27	58.7	568	2	US-09-207-388-24	Sequence 24, Appl	760	27	58.7	798	2	US-09-861-451A-12	Sequence 12, Appl
688	27	58.7	575	2	US-09-252-991A-22037	Sequence 22037, A	761	27	58.7	802	2	US-09-252-991A-17830	Sequence 17830, A
689	27	58.7	575	2	US-09-927-267-1	Sequence 1, Appl	762	27	58.7	841	2	US-10-332-795-11	Sequence 11, Appl
690	27	58.7	575	2	US-09-927-267-16	Sequence 16, Appl	763	27	58.7	853	2	US-09-489-039A-11009	Sequence 11009, A
691	27	58.7	577	1	US-08-756-317-13	Sequence 13, Appl	764	27	58.7	858	2	US-09-252-991A-31764	Sequence 31764, A
692	27	58.7	585	1	US-08-867-941-21	Sequence 21, Appl	765	27	58.7	858	2	US-09-949-002-498	Sequence 498, App
693	27	58.7	585	1	US-09-074-658-21	Sequence 21, Appl	766	27	58.7	878	2	US-08-732-429-2	Sequence 2, Appl
694	27	58.7	588	2	US-09-265-585C-34	Sequence 34, Appl	767	27	58.7	878	2	US-09-798-267-2	Sequence 2, Appl
695	27	58.7	589	2	US-09-270-767-45378	Sequence 45378, A	768	27	58.7	878	2	US-09-798-267-2	Sequence 2, Appl
696	27	58.7	592	2	US-09-408-020-80	Sequence 80, Appl	769	27	58.7	878	4	PCT-US95-05518-2	Sequence 2, Appl
697	27	58.7	596	2	US-09-797-3618-8	Sequence 8, Appl	770	27	58.7	884	1	US-08-066-167-2	Sequence 8, Appl
698	27	58.7	600	2	US-08-537-3618-9	Sequence 9, Appl	771	27	58.7	884	1	US-08-474-067-8	Sequence 8, Appl
699	27	58.7	601	1	US-08-606-288-7	Sequence 7, Appl	772	27	58.7	884	1	US-08-474-068A-8	Sequence 8, Appl
700	27	58.7	601	1	US-08-606-288-10	Sequence 10, Appl	773	27	58.7	884	1	US-08-474-671-94	Sequence 94, Appl
701	27	58.7	601	2	US-09-347-483-7	Sequence 7, Appl	774	27	58.7	894	1	US-08-472-481-7	Sequence 7, Appl
702	27	58.7	601	2	US-09-347-483-10	Sequence 10, Appl	775	27	58.7	905	2	US-10-132-350-46	Sequence 46, Appl
703	27	58.7	601	2	US-10-104-047-2566	Sequence 2566, Ap	776	27	58.7	905	2	US-10-132-350-48	Sequence 48, Appl
704	27	58.7	602	2	US-08-990-470A-3	Sequence 3, Appl	777	27	58.7	908	1	US-08-487-890A-94	Sequence 94, Appl
705	27	58.7	602	2	US-08-817-707-9	Sequence 9, Appl	778	27	58.7	908	1	US-08-478-435-94	Sequence 94, Appl
706	27	58.7	615	2	US-09-949-016-11320	Sequence 11320, A	779	27	58.7	908	1	US-08-337-483-94	Sequence 94, Appl
707	27	58.7	623	2	US-09-270-767-45228	Sequence 45228, A	780	27	58.7	908	2	US-08-478-373-94	Sequence 94, Appl
708	27	58.7	627	2	US-09-345-473E-46	Sequence 46, Appl	781	27	58.7	908	2	US-08-474-671-94	Sequence 94, Appl
709	27	58.7	627	2	US-09-345-473E-47	Sequence 47, Appl	782	27	58.7	908	2	US-08-483-577A-94	Sequence 94, Appl
710	27	58.7	627	2	US-09-862-027-46	Sequence 46, Appl	783	27	58.7	908	2	US-08-448-194-4	Sequence 4, Appl
711	27	58.7	627	2	US-09-862-027-47	Sequence 47, Appl	784	27	58.7	908	2	US-08-697-438-94	Sequence 94, Appl
712	27	58.7	631	2	US-08-448-489-17	Sequence 17, Appl	785	27	58.7	908	2	US-08-637-654-94	Sequence 94, Appl
713	27	58.7	631	2	US-09-689-730-17	Sequence 17, Appl	786	27	58.7	908	2	US-08-637-654-94	Sequence 94, Appl
714	27	58.7	632	2	US-09-354-129-8	Sequence 8, Appl	787	27	58.7	908	2	US-08-649-518-94	Sequence 94, Appl
715	27	58.7	632	2	US-09-504-357-8	Sequence 8, Appl	788	27	58.7	908	2	US-08-584-22	Sequence 22, Appl
716	27	58.7	643	2	US-09-178-252-25	Sequence 25, Appl	789	27	58.7	908	2	US-09-059-584-22	Sequence 22, Appl
717	27	58.7	643	2	US-09-826-660-25	Sequence 25, Appl	790	27	58.7	908	2	US-08-753-750B-12	Sequence 12, Appl
718	27	58.7	646	2	US-09-489-039A-12750	Sequence 12750, A	791	27	58.7	909	1	US-08-363-124A-4	Sequence 4, Appl
719	27	58.7	650	2	US-09-253-991A-24093	Sequence 24093, A	792	27	58.7	909	2	US-09-489-039A-13915	Sequence 13915, A
720	27	58.7	650	2	US-09-487-558B-430	Sequence 430, App	793	27	58.7	909	1	US-08-667-941-13	Sequence 13, Appl
721	27	58.7	651	2	US-09-248-796A-18051	Sequence 18051, A	794	27	58.7	909	1	US-08-667-941-17	Sequence 17, Appl
722	27	58.7	660	2	US-08-704-711A-18	Sequence 18, Appl	795	27	58.7	909	1	US-08-445-192-2	Sequence 2, Appl
723	27	58.7	660	2	US-09-521-220-18	Sequence 18, Appl	796	27	58.7	909	1	US-08-445-192-2	Sequence 2, Appl
724	27	58.7	660	2	US-09-391-104-19	Sequence 19, Appl	797	27	58.7	909	1	US-08-445-192-2	Sequence 2, Appl
725	27	58.7	660	2	US-09-917-254-89	Sequence 89, Appl	798	27	58.7	933	1	US-08-445-192-2	Sequence 2, Appl
726	27	58.7	660	2	US-09-949-016-6512	Sequence 6512, Ap	799	27	58.7	933	1	US-08-445-192-2	Sequence 2, Appl
727	27	58.7	660	2	US-09-949-016-7937	Sequence 7937, Ap	800	27	58.7	998	2	US-09-949-016-8326	Sequence 8326, Ap
728	27	58.7	660	2	US-10-153-185-14	Sequence 14, Appl	801	27	58.7	1000	1	US-08-867-941-15	Sequence 15, Appl
729	27	58.7	660	2	US-09-194-468A-30	Sequence 30, Appl	802	27	58.7	1000	1	US-08-867-941-15	Sequence 15, Appl
730	27	58.7	663	2	US-09-198-452A-409	Sequence 409, App	803	27	58.7	1000	2	US-09-074-658-12	Sequence 12, Appl
731	27	58.7	666	2	US-09-270-767-62249	Sequence 62249, A	804	27	58.7	1003	2	US-09-074-658-16	Sequence 16, Appl
732	27	58.7	666	2	US-09-438-185A-390	Sequence 390, App	805	27	58.7	1003	2	US-09-540-236-2757	Sequence 26, Appl
733	27	58.7	685	1	US-08-878-989-1	Sequence 1, Appl	806	27	58.7	1019	1	US-08-271-364A-7	Sequence 7, Appl
734	27	58.7	685	1	US-09-136-282-2	Sequence 2, Appl	807	27	58.7	1019	1	US-08-271-364A-7	Sequence 7, Appl
735	27	58.7	685	2	US-09-272-796-1	Sequence 1, Appl	808	27	58.7	1027	1	US-09-004-225-2	Sequence 2, Appl
736	27	58.7	685	2	US-09-505-744-2	Sequence 2, Appl	809	27	58.7	1027	2	US-09-004-225-2	Sequence 2, Appl
737	27	58.7	685	2	US-09-771-161A-249	Sequence 249, App	810	27	58.7	1027	2	US-09-084-346-2	Sequence 2, Appl
738	27	58.7	685	2	US-09-771-161A-250	Sequence 250, App	811	27	58.7	1027	2	US-09-104-704-2	Sequence 2, Appl
739	27	58.7	685	2	US-09-771-161A-251	Sequence 251, App	812	27	58.7	1039	2	US-09-409-648-7	Sequence 8, Appl
740	27	58.7	687	1	US-08-449-645A-29	Sequence 29, Appl	813	27	58.7	1039	2	US-09-409-648-7	Sequence 8, Appl
741	27	58.7	687	1	US-08-702-367A-29	Sequence 29, Appl	814	27	58.7	1039	2	US-09-409-648-7	Sequence 8, Appl
742	27	58.7	711	2	US-09-902-540-12840	Sequence 12840, A	815	27	58.7	1039	2	US-09-409-648-7	Sequence 8, Appl
743	27	58.7	719	2	US-08-973-005A-12	Sequence 12, Appl	816	27	58.7	1039	6	US-09-949-002-298	Sequence 298, App
744	27	58.7	719	1	US-09-003-217-2	Sequence 2, Appl	817	27	58.7	1039	6	5196511-2	Patent No. 5196511
745	27	58.7	719	2	US-09-218-942-2	Sequence 2, Appl	818	27	58.7	1066	2	US-09-252-991A-31530	Sequence 31530, A
746	27	58.7	721	2	US-09-270-767-46645	Sequence 46645, A	819	27	58.7	1091	2	US-08-986-485-5	Sequence 5, Appl
747	27	58.7	724	2	US-10-104-047-2224	Sequence 2224, Ap	820	27	58.7	1101	2	US-08-986-485-2	Sequence 2, Appl
748	27	58.7	735	2	US-09-902-540-14243	Sequence 14243, A	821	27	58.7	1115	2	US-10-012-231A-58	Sequence 58, Appl
749	27	58.7	746	2	US-09-248-796A-17109	Sequence 17109, A	822	27	58.7	1115	2	US-10-015-389A-58	Sequence 58, Appl
750	27	58.7	753	2	US-09-248-796A-15445	Sequence 15445, A	823	27	58.7	1115	2	US-10-015-389A-58	Sequence 58, Appl
751	27	58.7	753	1	US-08-867-941-20	Sequence 20, Appl	824	27	58.7	1115	2	US-10-015-393A-58	Sequence 58, Appl
752	27	58.7	753	1	US-09-074-658-20	Sequence 20, Appl	825	27	58.7	1115	2	US-10-015-393A-58	Sequence 58, Appl
753	27	58.7	753	1	US-08-677-862-2	Sequence 2, Appl	826	27	58.7	1115	2	US-10-006-041A-58	Sequence 58, Appl
754	27	58.7	763	1	US-09-252-571-2	Sequence 2, Appl	827	27	58.7	1115	2	US-10-012-064A-58	Sequence 58, Appl
755	27	58.7	763	1	US-09-434-065-2	Sequence 2, Appl	828	27	58.7	1147	2	US-09-538-092-1074	Sequence 1074, Ap
756	27	58.7	763	2	US-08-789-275-4	Sequence 4, Appl	829	27	58.7	1169	1	US-08-315-468-4	Sequence 4, Appl
757	27	58.7	763	2	US-08-789-275-5	Sequence 5, Appl	830	27	58.7	1186	2	US-09-178-252-23	Sequence 23, Appl

831	27	58.7	1186	2	US-09-826-660-23	Sequence 23, Appl	904	26	56.5	77	2	US-09-149-476-561	Sequence 561, App
832	27	58.7	1194	2	US-10-191-029-10	Sequence 10, Appl	905	26	56.5	77	2	US-09-663-600A-100	Sequence 100, App
833	27	58.7	1207	1	US-07-951-715A-7	Sequence 7, Appl1	906	26	56.5	78	2	US-09-149-476-407	Sequence 407, App
834	27	58.7	1207	1	US-08-459-448A-7	Sequence 7, Appl1	907	26	56.5	79	2	US-09-100-802-4	Sequence 4, Appl1
835	27	58.7	1207	2	US-08-459-595A-7	Sequence 7, Appl1	908	26	56.5	82	2	US-09-621-976-5109	Sequence 5109, App
836	27	58.7	1207	2	US-08-459-504B-7	Sequence 7, Appl1	909	26	56.5	82	2	US-09-270-767-34676	Sequence 34676, A
837	27	58.7	1207	2	US-08-459-444-7	Sequence 7, Appl1	910	26	56.5	85	2	US-09-270-767-49893	Sequence 49893, A
838	27	58.7	1207	2	US-09-053-549-8	Sequence 8, Appl1	911	26	56.5	92	2	US-09-513-999C-4222	Sequence 4222, App
839	27	58.7	1207	2	US-09-547-422-7	Sequence 7, Appl1	912	26	56.5	92	2	US-09-107-433-1884	Sequence 1884, App
840	27	58.7	1207	2	US-09-488-462-7	Sequence 7, Appl1	913	26	56.5	92	2	US-09-902-540-13721	Sequence 13721, A
841	27	58.7	1227	1	US-08-448-170-8	Sequence 8, Appl1	914	26	56.5	99	2	US-09-599-360B-194	Sequence 194, App
842	27	58.7	1227	2	US-09-053-549-2	Sequence 2, Appl1	915	26	56.5	99	2	US-09-663-600A-194	Sequence 194, App
843	27	58.7	1227	2	US-08-961-803-9	Sequence 9, Appl1	916	26	56.5	99	2	US-09-801-115B-2	Sequence 115B-2
844	27	58.7	1227	2	US-09-661-322A-63	Sequence 63, Appl	917	26	56.5	101	2	US-09-733-210-1295	Sequence 1295, App
845	27	58.7	1228	2	US-09-661-322A-38	Sequence 38, Appl	918	26	56.5	101	2	US-09-252-991A-2360	Sequence 2360, A
846	27	58.7	1229	1	US-08-100-709-4	Sequence 4, Appl1	919	26	56.5	108	2	US-09-723-210-1295	Sequence 1295, App
847	27	58.7	1229	1	US-08-176-865-4	Sequence 4, Appl1	920	26	56.5	111	2	US-09-270-767-53364	Sequence 53364, A
848	27	58.7	1229	1	US-08-474-038-4	Sequence 4, Appl1	921	26	56.5	111	2	US-09-471-276-1598	Sequence 1598, App
849	27	58.7	1229	1	US-08-779-046-4	Sequence 4, Appl1	922	26	56.5	114	2	US-09-537-871A-21	Sequence 21, Appl
850	27	58.7	1229	1	US-08-881-340-4	Sequence 4, Appl1	923	26	56.5	116	2	US-09-621-976-7392	Sequence 7392, App
851	27	58.7	1280	2	US-09-377-285B-18	Sequence 18, Appl	924	26	56.5	116	2	US-09-248-796A-27574	Sequence 27574, A
852	27	58.7	1280	2	US-10-192-381-18	Sequence 18, Appl	925	26	56.5	116	2	US-09-248-796A-24273	Sequence 24273, A
853	27	58.7	1327	2	US-09-196-387-2	Sequence 2, Appl1	926	26	56.5	125	2	US-09-902-540-12158	Sequence 12158, A
854	27	58.7	1327	2	US-09-841-835-2	Sequence 2, Appl1	927	26	56.5	126	2	US-10-101-464A-609	Sequence 609, App
855	27	58.7	1327	2	US-09-972-115A-8	Sequence 8, Appl1	928	26	56.5	129	2	US-09-621-976-5177	Sequence 5177, App
856	27	58.7	1367	2	US-08-864-641B-18	Sequence 18, Appl	929	26	56.5	133	2	US-09-621-976-5177	Sequence 5177, App
857	27	58.7	1405	2	US-09-248-796A-18103	Sequence 18103, A	930	26	56.5	134	2	US-09-270-767-43790	Sequence 43790, A
858	27	58.7	1417	1	US-08-559-303B-78	Sequence 78, Appl	931	26	56.5	134	2	US-09-248-796A-42351	Sequence 42351, App
859	27	58.7	1417	2	US-08-781-891-78	Sequence 78, Appl	932	26	56.5	140	2	US-09-107-532A-1251	Sequence 1251, App
860	27	58.7	1417	2	US-09-175-828-78	Sequence 78, Appl	933	26	56.5	142	2	US-08-678-369-6	Sequence 6, Appl1
861	27	58.7	1417	2	US-09-618-166-78	Sequence 78, Appl	934	26	56.5	146	1	US-09-047-243-6	Sequence 6, Appl1
862	27	58.7	1417	2	US-09-753-143-78	Sequence 78, Appl	935	26	56.5	146	1	US-08-908-908-4	Sequence 4, Appl1
863	27	58.7	1587	2	US-09-000-094-46	Sequence 46, Appl	936	26	56.5	146	1	US-09-678-369-6	Sequence 6, Appl1
864	27	58.7	1587	2	US-10-011-749-46	Sequence 46, Appl	937	26	56.5	146	2	US-08-688-908-4	Sequence 8, Appl1
865	27	58.7	1709	2	US-09-949-016-10503	Sequence 8902, App	938	26	56.5	146	2	US-08-914-379C-41	Sequence 41, Appl1
866	27	58.7	1878	2	US-09-949-016-8902	Sequence 8903, App	939	26	56.5	147	2	US-09-200-919-3	Sequence 3, Appl1
867	27	58.7	1878	2	US-09-949-016-8903	Sequence 2, Appl1	940	26	56.5	147	2	US-09-200-919-3	Sequence 3, Appl1
868	27	58.7	1909	2	US-09-590-968B-2	Sequence 5, Appl1	941	26	56.5	149	2	US-09-183-861-86	Sequence 86, Appl
869	27	58.7	1911	1	US-08-348-006B-5	Sequence 5, Appl1	942	26	56.5	149	2	US-09-551-974A-86	Sequence 86, Appl
870	27	58.7	1911	1	US-08-800-825A-5	Sequence 5, Appl1	943	26	56.5	149	2	US-09-565-501A-86	Sequence 86, Appl
871	27	58.7	1911	2	US-09-158-657-5	Sequence 5, Appl1	944	26	56.5	149	2	US-09-639-206A-86	Sequence 86, Appl
872	27	58.7	1911	4	PCT-US94-10166-5	Sequence 52, Appl	945	26	56.5	149	2	US-09-874-923-86	Sequence 86, Appl
873	27	58.7	1953	2	US-09-917-254-92	Sequence 11, Appl	946	26	56.5	150	2	US-08-945-329A-50	Sequence 50, Appl
874	27	58.7	2432	2	US-09-074-658-15	Sequence 15, Appl	947	26	56.5	150	2	US-09-902-540-10700	Sequence 10700, A
875	27	58.7	2432	2	US-09-074-658-11	Sequence 11, Appl	948	26	56.5	150	2	US-09-562-914-50	Sequence 50, Appl
876	27	58.7	2432	2	US-09-413-814-48	Sequence 48, Appl	949	26	56.5	152	2	US-09-599-360B-120	Sequence 120, App
877	27	58.7	2517	2	US-09-902-540-15380	Sequence 15380, A	950	26	56.5	152	2	US-09-543-681A-6576	Sequence 6576, App
878	27	58.7	2517	1	US-08-826-267-2	Sequence 2, Appl1	951	26	56.5	152	2	US-09-801-115B-4	Sequence 4, Appl1
879	27	58.7	3413	2	US-10-042-665A-8	Sequence 8, Appl1	952	26	56.5	152	2	US-09-999-833A-190	Sequence 190, App
880	27	58.7	3413	2	US-08-061-376-5	Sequence 5, Appl1	953	26	56.5	152	2	US-09-102-445A-190	Sequence 190, App
881	27	58.7	3969	2	US-09-538-092-1262	Sequence 1262, App	954	26	56.5	152	2	US-09-771-161A-104	Sequence 104, App
882	27	58.7	4928	2	US-09-036-987A-5	Sequence 5, Appl1	955	26	56.5	156	2	US-09-252-991A-16845	Sequence 16845, A
883	27	58.7	4928	2	US-09-370-700-5	Sequence 5, Appl1	956	26	56.5	164	2	US-08-759-628-3	Sequence 3, Appl1
884	27	58.7	4928	2	US-09-603-207-5	Sequence 5, Appl1	957	26	56.5	164	2	US-10-104-047-2698	Sequence 2698, App
885	27	58.7	4928	2	US-09-335-409-5	Sequence 5, Appl1	958	26	56.5	179	2	US-09-248-796A-17828	Sequence 17828, A
886	27	58.7	7257	2	US-09-568-102-5	Sequence 5, Appl1	959	26	56.5	180	2	US-09-198-452A-741	Sequence 741, App
887	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	960	26	56.5	181	2	US-09-438-185A-701	Sequence 701, App
888	27	58.7	7257	2	US-09-568-480-5	Sequence 5, Appl1	961	26	56.5	181	2	US-09-117-257-42	Sequence 42, Appl
889	27	58.7	7257	2	US-09-568-486-5	Sequence 5, Appl1	962	26	56.5	183	2	US-09-489-352-42	Sequence 42, Appl
890	27	58.7	7257	2	US-09-568-472-5	Sequence 5, Appl1	963	26	56.5	183	2	US-09-543-681A-7280	Sequence 7280, App
891	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	964	26	56.5	192	2	US-09-107-532A-5752	Sequence 5752, App
892	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	965	26	56.5	192	2	US-09-270-767-33147	Sequence 33147, A
893	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	966	26	56.5	192	2	US-09-543-681A-16826	Sequence 16826, A
894	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	967	26	56.5	201	2	US-09-252-991A-15826	Sequence 15826, A
895	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	968	26	56.5	201	2	US-09-489-352-42	Sequence 35242, A
896	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	969	26	56.5	201	2	US-09-543-681A-16826	Sequence 16826, A
897	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	970	26	56.5	201	2	US-09-489-352-42	Sequence 35242, A
898	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	971	26	56.5	201	2	US-09-543-681A-16826	Sequence 16826, A
899	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	972	26	56.5	201	2	US-09-489-352-42	Sequence 35242, A
900	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	973	26	56.5	201	2	US-09-543-681A-16826	Sequence 16826, A
901	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	974	26	56.5	201	2	US-09-489-352-42	Sequence 35242, A
902	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	975	26	56.5	201	2	US-09-543-681A-16826	Sequence 16826, A
903	27	58.7	7257	2	US-09-567-969-5	Sequence 5, Appl1	976	26	56.5	201	2	US-09-489-352-42	Sequence 35242, A

977 26 55.5 215 2 US-09-949-016-6060 Sequence 6060, Ap
978 26 55.5 216 2 US-09-270-767-59025 Sequence 59025, A
979 26 55.5 218 2 US-08-914-375C-7 Sequence 7, Appl
980 26 55.5 218 2 US-08-914-375C-31 Sequence 31, Appl
981 26 55.5 218 2 US-09-270-767-40890 Sequence 40890, A
982 26 55.5 218 2 US-09-270-767-56106 Sequence 56106, A
983 26 55.5 220 2 US-09-328-352-4307 Sequence 4307, Ap
984 26 55.5 221 2 US-09-270-767-60068 Sequence 60068, A
985 26 55.5 222 2 US-09-949-016-10739 Sequence 10739, A
986 26 55.5 222 2 US-09-949-016-10740 Sequence 10740, A
987 26 55.5 224 1 US-08-608-241-4 Sequence 4, Appl
988 26 55.5 224 1 US-08-922-182-4 Sequence 4, Appl
989 26 55.5 224 1 US-08-919-953-4 Sequence 4, Appl
990 26 55.5 224 1 US-08-871-572B-9 Sequence 9, Appl
991 26 55.5 224 2 US-08-871-572B-11 Sequence 11, Appl
992 26 55.5 226 2 US-09-192-983-4 Sequence 4, Appl
993 26 55.5 226 2 US-09-248-796A-14964 Sequence 14964, A
994 26 55.5 248 1 US-08-674-168-32 Sequence 32, Appl
995 26 55.5 248 2 US-08-985-908-11 Sequence 11, Appl
996 26 55.5 248 2 US-08-852-730-24 Sequence 24, Appl
997 26 55.5 248 2 US-09-353-133-3 Sequence 3, Appl
998 26 55.5 248 2 US-09-270-767-43329 Sequence 43329, A
999 26 55.5 248 2 US-10-337-985-3 Sequence 3, Appl
1000 26 55.5 248 2 US-09-810-521-3 Sequence 3, Appl

ALIGNMENTS

RESULT 1
US-08-217-188A-62
Sequence 62, Application US/08217188A
Patent No. 5554724
GENERAL INFORMATION:
APPLICANT: Melief, Cornelis J. M.
APPLICANT: Visseren, M. J. W.
APPLICANT: Kast, J. W. M.
APPLICANT: van der Bruggen, Pierre
APPLICANT: Boon-Falleur, Thierry
TITLE OF INVENTION: Isolated Tumor Rejection Antigen
TITLE OF INVENTION: Precursor MAGE-2 Derived Peptides, and Uses Thereof
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
COUNTRY: USA
ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/217,188A
FILING DATE: 24-MARCH-1994
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5554724man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5340
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 62:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acid residues
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-217-188A-62

Query Match 100.0%; Score 46; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDDLOPETT 9
Db 1 MLDDLOPETT 9

RESULT 2

US-08-687-226-62
Sequence 62, Application US/08687226
Patent No. 3686068
GENERAL INFORMATION:
APPLICANT: Melief, Cornelis J. M.; Visseren, M. W.;
APPLICANT: van der Burg, Sjoerd; van der Bruggen, Pierre;
APPLICANT: Boon-Falleur, Thierry
TITLE OF INVENTION: Isolated Peptides Derived From
TITLE OF INVENTION: MAGE-2, Cytolytic T Cells Specific To Complexes Of
NUMBER OF SEQUENCES: 72
Peptides And HLA-A2 Molecules, And Uses Thereof
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
COUNTRY: USA
ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/687,226
FILING DATE: 25-JULY-1996
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/217,188
FILING DATE: 24-MARCH-1994
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5686068man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5447
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 62:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acid residues
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-687-226-62

Query Match 100.0%; Score 46; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDDLOPETT 9
Db 1 MLDDLOPETT 9

RESULT 3

US-08-667-725B-62
Sequence 62, Application US/08667725B
Patent No. 6063900
GENERAL INFORMATION:
APPLICANT: Melief, Cornelis J. M.
APPLICANT: Visseren, M. J. W.
APPLICANT: Kast, J. W. M.
APPLICANT: van der Bruggen, Pierre

APPLICANT: Boon-Falleur, Thierry
TITLE OF INVENTION: Isolated Tumor Rejection Antigen
TITLE OF INVENTION: Precursor MAG-2 Derived Peptides, and Uses Thereof
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fulbright & Jaworski LLP
STREET: 666 Fifth Avenue
CITY: New York City
STATE: New York
COUNTRY: USA
ZIP: 10103
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/667,725B
FILING DATE: 21 June 1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 6063900man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5340.1 DIV (081585)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 318-3000
TELEFAX: (212) 752-5958
INFORMATION FOR SEQ ID NO: 62:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acid residues
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-667-725B-62

Query Match 100.0%; Score 46; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDL0PETT 9
DB 1 MIDL0PETT 9

RESULT 4
US-09-007-748-62
Sequence 62, Application US/09007748
Patent No. 6147187
GENERAL INFORMATION:
APPLICANT: Melief, Cornelis J. M.
APPLICANT: Visseren, M. J. W.
APPLICANT: Kaat, W. M. W.
APPLICANT: van der Bruggen, Pierre
APPLICANT: Boon-Falleur, Thierry
TITLE OF INVENTION: Isolated Tumor Rejection Antigen
TITLE OF INVENTION: Precursor MAG-2 Derived Peptides, and Uses Thereof
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fulbright & Jaworski LLP
STREET: 666 Fifth Avenue
CITY: New York City
STATE: New York
COUNTRY: USA
ZIP: 10103
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/007,748
FILING DATE: 15 January 1998
CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 6147187man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5340.2 DIV (081572)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 318-3000
TELEFAX: (212) 752-5958
INFORMATION FOR SEQ ID NO: 62:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acid residues
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-007-748-62

Query Match 100.0%; Score 46; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDL0PETT 9
DB 1 MIDL0PETT 9

RESULT 5
US-08-197-484-71
Sequence 71, Application US/08197484
Patent No. 641931
GENERAL INFORMATION:
APPLICANT: VITIELLO, Maria A.
APPLICANT: CHESTNUT, Robert W.
APPLICANT: SETTE, Alessandro D.
APPLICANT: CELIS, Bascban
APPLICANT: GRAY, Howard
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Kourie and Crew
STREET: Stewart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/007,748
FILING DATE: 15 January 1998
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 71:

SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-197-484-71

Query Match 100.0%; Score 46; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLPETT 9
Db 1 MLDLPETT 9

RESULT 6
PCT-US95-02121-71
Sequence 71, Application PC/TUS9502121
GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/02121
FILING DATE: 16-FEB-1995
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/197,484
FILING DATE: 16-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 1437-26-4PC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
PCT-US95-02121-71

Query Match 100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLPETT 9
Db 1 MLDLPETT 9

RESULT 7
US-08-902-516-19
Sequence 19, Application US/08902516
Patent No. 5891432
GENERAL INFORMATION:
APPLICANT: Soo Hoo, William

TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
TITLE OF INVENTION: COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
RESPONSE USING SAME
NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS:
ADDRESSEE: CAMPBELL & FLORES, LLP
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUNTRY: United States
ZIP: 92121

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/902,516

FILING DATE: 29-JUL-1997

CLASSIFICATION: 424

ATTORNEY/AGENT INFORMATION:

NAME: Campbell, Cathryn A.

REGISTRATION NUMBER: 31,815

REFERENCE/DOCKET NUMBER: P-IM 2442

TELECOMMUNICATION INFORMATION:

TELEPHONE: (619) 535-9001

TELEFAX: (619) 535-8949

INFORMATION FOR SEQ ID NO: 19:

SEQUENCE CHARACTERISTICS:

LENGTH: 10 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-902-516-19

Query Match 100.0%; Score 46; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLPETT 9
Db 2 MLDLPETT 10

RESULT 8
US-08-704-344-22
Sequence 22, Application US/08704344
Patent No. 6218363
GENERAL INFORMATION:

APPLICANT: BASERGA, Renato L.

APPLICANT: RESNICOFF, Mariana

APPLICANT: HUANG, Ziwei

TITLE OF INVENTION: MHC PEPTIDES AND METHODS OF USE

NUMBER OF SEQUENCES: 23

CORRESPONDENCE ADDRESS:

ADDRESSEE: HALE and DORR LLP

STREET: 1455 Pennsylvania Avenue, N.W.

CITY: Washington

STATE: D.C.

COUNTRY: USA

ZIP: 20004

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/704,344
FILING DATE: 28-AUG-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: WIXON, Henry N.
REGISTRATION NUMBER: 32,073
REFERENCE/DOCKET NUMBER: 104322.196
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 942-8459
TELEFAX: (202) 942-8484
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-704-344-22

Query Match 100.0%; Score 46; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

QY 1 MLDLOPETT 9
Db 2 MLDLOPETT 10

RESULT 9
US-09-847-185-19
Sequence 19, Application US/09847185
Patent No. 6482407
GENERAL INFORMATION:
APPLICANT: Soo Hoo, William
TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
RESPONSE USING SAME
NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS:
ADDRESSER: CAMPBELL & FLORES, LLP
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUNTRY: United States
ZIP: 92121
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/847,185
FILING DATE: 01-May-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/201,931
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-IM 2442
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)535-8901
TELEFAX: (619)535-8949
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-09-847-185-19
Query Match 100.0%; Score 46; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

QY 1 MLDLOPETT 9
Db 2 MLDLOPETT 10

RESULT 10
US-09-601-729-270
Sequence 270, Application US/09601729
Patent No. 6683052
GENERAL INFORMATION:
APPLICANT: THIAM, KADER
APPLICANT: AURIAULT, CLAUDE
APPLICANT: GRAS-MASSE, HELENE
APPLICANT: LOING, ESTELLE
APPLICANT: VERMAERDE, CLAUDE
APPLICANT: GUILLET, JEAN GERARD
TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USES
TITLE OF INVENTION: THEROF IN PHARMACEUTICAL COMPOSITIONS
FILE REFERENCE: USB-97-AU-IN
CURRENT APPLICATION NUMBER: US/09/601,729
CURRENT FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: PCT/FR99/00259
PRIOR FILING DATE: 1999-02-05
PRIOR APPLICATION NUMBER: 98 01439
PRIOR FILING DATE: 1998-02-06
NUMBER OF SEQ ID NOS: 281
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 270
LENGTH: 10
TYPE: PPT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-601-729-270

Query Match 100.0%; Score 46; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

QY 1 MLDLOPETT 9
Db 2 MLDLOPETT 10

RESULT 11
US-09-980-177A-19
Sequence 19, Application US/09980177A
Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Jochmus, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the
TITLE OF INVENTION: Papilloma virus L1-Protein and Use Thereof in Diagnosis and
Therapy
FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/09/980,177A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 19
LENGTH: 10

TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-980-177A-19

Query Match 100.0%; Score 46; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||||
Db 2 MLDLOPETT 10

RESULT 12
US-08-075-541D-35
Sequence 35, Application US/08075541D
Patent No. 6183745

GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 35:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-35

Query Match 100.0%; Score 46; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||||
Db 4 MLDLOPETT 12

RESULT 13
US-08-075-541D-45

Sequence 45, Application US/08075541D
Patent No. 6183745

GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 45:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-45

Query Match 100.0%; Score 46; DB 2; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||||
Db 1 MLDLOPETT 9

RESULT 14
US-08-934-915-46
Sequence 46, Application US/08934915
Patent No. 5932412

GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500

CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. FOUTCH
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-46

Query Match 100.0%; Score 46; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLQPEPT 9
Db 11 MDLQPEPT 19

RESULT 15
US-08-075-541D-43
Sequence 43, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991

ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-43

Query Match 100.0%; Score 46; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLQPEPT 9
Db 12 MDLQPEPT 20

RESULT 16
US-08-075-541D-44
Sequence 44, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-44

Query Match 100.0%; Score 46; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPETT 9
|||
Db 7 MLDLQPETT 15

RESULT 17
US-09-980-177A-69

; Sequence 69, Application US/09980177A

; Patent No. 6838084

; GENERAL INFORMATION:

; APPLICANT: Jochmus, Ingrid

; APPLICANT: Nieland, John

; TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the

; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and

; TITLE OF INVENTION: Therapy

; FILE REFERENCE: 50125/036001

; CURRENT FILING DATE: 2001-11-29

; PRIOR APPLICATION NUMBER: PCT/EP00/05006

; PRIOR FILING DATE: 2000-05-31

; PRIOR APPLICATION NUMBER: DE 19925199.1

; PRIOR FILING DATE: 1999-06-01

; NUMBER OF SEQ ID NOS: 77

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 69

; LENGTH: 20

; TYPE: PRT

; ORGANISM: Human papillomavirus type 16

US-09-980-177A-69

Query Match 100.0%; Score 46; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPETT 9
|||
Db 12 MLDLQPETT 20

RESULT 18

US-09-980-177A-70

; Sequence 70, Application US/09980177A

; Patent No. 6838084

; GENERAL INFORMATION:

; APPLICANT: Jochmus, Ingrid

; APPLICANT: Nieland, John

; TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the

; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and

; TITLE OF INVENTION: Therapy

; FILE REFERENCE: 50125/036001

; CURRENT FILING DATE: 2001-11-29

; PRIOR APPLICATION NUMBER: PCT/EP00/05006

; PRIOR FILING DATE: 2000-05-31

; PRIOR APPLICATION NUMBER: DE 19925199.1

; PRIOR FILING DATE: 1999-06-01

; NUMBER OF SEQ ID NOS: 77

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 70

; LENGTH: 20

; TYPE: PRT

; ORGANISM: Human papillomavirus type 16

US-09-980-177A-70

Query Match 100.0%; Score 46; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPETT 9
|||
Db 1 MLDLQPETT 9

RESULT 19
US-09-980-523A-14

; Sequence 14, Application US/09980523A

; Patent No. 6783763

; GENERAL INFORMATION:

; APPLICANT: CHOPPIN, JEANNINE

; APPLICANT: BOURGAULT VILLADA, ISABELLE

; APPLICANT: GUILLET, JEAN-GERARD

; APPLICANT: CONNAN, FRANCINE

; APPLICANT: FERRIES, ESTELLE

; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7

; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE

; TITLE OF INVENTION: PARTICULARLY IN VACCINATION

; FILE REFERENCE: WO81 AO INS

; CURRENT FILING DATE: 2002-04-29

; PRIOR APPLICATION NUMBER: PCT/FR00/01513

; PRIOR FILING DATE: 2000-05-31

; PRIOR APPLICATION NUMBER: FR 99/07012

; PRIOR FILING DATE: 1999-06-03

; NUMBER OF SEQ ID NOS: 24

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 14

; LENGTH: 23

; TYPE: PRT

; ORGANISM: Human Papillomavirus

US-09-980-523A-14

Query Match 100.0%; Score 46; DB 2; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.037;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPETT 9
|||
Db 10 MLDLQPETT 18

RESULT 20

US-08-363-586-1

; Sequence 1, Application US/08363586

; Patent No. 5629161

; GENERAL INFORMATION:

; APPLICANT: Mueller, Martin

; APPLICANT: Giesemann, Lutz

; TITLE OF INVENTION: Use of HPV-16 E6 and E7-Gene Derived

; TITLE OF INVENTION: Peptides for the Diagnostic Purpose

; NUMBER OF SEQUENCES: 4

; CORRESPONDENCE ADDRESS:

; ADDRESS: Finnegan, Henderson, Farbow, Garrett &

; ADDRESSER: Dunner

; STREET: 1300 I Street, N.W.

; CITY: Washington

; STATE: D.C.

; COUNTRY: USA

; ZIP: 20005-3315

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/363,586

; FILING DATE: 23-DEC-1994

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/909,296

; FILING DATE: 09-JUL-1992

; APPLICATION NUMBER: EP 91111720.8

FILING DATE: 13-JUL-1991
ATTORNEY/AGENT INFORMATION:
NAME: Madler, Linda A.
REGISTRATION NUMBER: 33,218
REFERENCE/DOCKET NUMBER: 02481-1195-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-363-586-1

Query Match 100.0%; Score 46; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 7 MLDLOPETT 15

RESULT 21
US-08-934-915-51
Sequence 51, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P. A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. FOUTCH
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 51:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-51

Query Match 100.0%; Score 46; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 11 MLDLOPETT 19

RESULT 22
US-09-486-394-1
Sequence 1, Application US/09486394
Patent No. 6478749
GENERAL INFORMATION:
APPLICANT: Hopfl, Reinhard
TITLE OF INVENTION: Diagnostic kit for Skin Tests, and Method
FILE REFERENCE: 032929-001
CURRENT APPLICATION NUMBER: US/09/486,394
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/04773
PRIOR FILING DATE: 1998-07-30
PRIOR APPLICATION NUMBER: DE 197 37 409.3
PRIOR FILING DATE: 1997-08-27
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 30
TYPE: PRT
ORGANISM: Human papillomavirus type 16
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(30)
OTHER INFORMATION: E7 peptide.
US-09-486-394-1

Query Match 100.0%; Score 46; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 12 MLDLOPETT 20

RESULT 23
US-09-828-645-3
Sequence 3, Application US/09828645
Patent No. 6743593
GENERAL INFORMATION:
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
FILE REFERENCE: 146-1-002
CURRENT APPLICATION NUMBER: US/09/828,645
CURRENT FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: US 60/194,796
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 30
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-3

Query Match 100.0%; Score 46; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 7 MLDLOPETT 15

RESULT 24
US-09-828-645-7
; Sequence 7, Application US/09828645
; Patent No. 6743593
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
; NAME/KEY: misc feature
; LOCATION: (19)-(19)
; OTHER INFORMATION: Xaa = L-carboxymethylcysteine
US-09-828-645-7

Query Match 100.0%; Score 46; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.049;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
| | | | |
DB 7 MLDLPETT 15

RESULT 25
US-09-390-027-6
; Sequence 6, Application US/09390027
; Patent No. 6235523
; GENERAL INFORMATION:
; APPLICANT: GAJEWICZYK, Diane M.
; APPLICANT: BERSSON, Roy
; APPLICANT: YAO, Fei-Long
; APPLICANT: CAO, Shi-Xian
; APPLICANT: KLEIN, Michel H.
; APPLICANT: TARTAGLIA, James
; APPLICANT: MOINGEON, Philippe
; APPLICANT: ROVINSKI, Benjamin
; TITLE OF INVENTION: TREATMENT OF CERVICAL CANCER
; FILE REFERENCE: 1038-982 MIS:jb
; CURRENT APPLICATION NUMBER: US/09/390,027
; CURRENT FILING DATE: 1999-09-03
; EARLIER APPLICATION NUMBER: 60/099,291
; EARLIER FILING DATE: 1998-09-04
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 59
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-390-027-6

Query Match 100.0%; Score 46; DB 2; Length 59;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
| | | | |
DB 15 MLDLPETT 23

RESULT 26
US-08-406-248-6
; Sequence 6, Application US/08406248
; Patent No. 5736318
; GENERAL INFORMATION:
; APPLICANT: Munger, Karl
; APPLICANT: Jones, D. Leanne
; TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
; TITLE OF INVENTION: TRANSFORMED CELLS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kusner
; STREET: 200 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/406,248
; FILING DATE:
; CLASSIFICATION: 436
; ATTORNEY/AGENT INFORMATION:
; NAME: McDaniel's, Patricia A.
; REGISTRATION NUMBER: 33,194
; REFERENCE/DOCKET NUMBER: HAZ-011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-406-248-6

Query Match 100.0%; Score 46; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
| | | | |
DB 12 MLDLPETT 20

RESULT 27
US-08-075-541D-42
; Sequence 42, Application US/08075541D
; Patent No. 6183745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZ JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2070
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 42:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-42

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
DB 12 MLDLOPETT 20

RESULT 28
US-09-382-616A-1
Sequence 1, Application US/09382616A
Patent No. 6200746
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Wanxia
TITLE OF INVENTION: Methods to identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/382,616A
PRIOR FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: 09/382,616
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sv4vllagi
US-09-382-616A-1

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
DB 12 MLDLOPETT 20

RESULT 29
US-08-944-368A-4
Sequence 4, Application US/08944368A
Patent No. 6228368
GENERAL INFORMATION:
APPLICANT: Gissman, et al.
TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine

TITLE OF INVENTION: Formulations and Methods of Use
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSER: Borun
STREET: 233 South Wacker Drive, 6300 Sears Tower
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/944,368A
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27013/34028
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-944-368A-4

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
DB 12 MLDLOPETT 20

RESULT 30
US-09-820-764-4
Sequence 4, Application US/09820764
Patent No. 6352966
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,764
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:

NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-764-4

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
|||
Db 12 MLDLPETT 20

RESULT 31
US-09-613-303-8
Sequence 8, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
|||
Db 12 MLDLPETT 20

RESULT 32
US-09-566-420-19
Sequence 19, Application US/09566420
Patent No. 6500641
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/09/566,420
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19

SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-09-566-420-19

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
|||
Db 12 MLDLPETT 20

RESULT 33
US-09-986-118A-4
Sequence 4, Application US/09986118A
Patent No. 6562351
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALBER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESS: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. 6562351-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLPETT 9
|||
Db 12 MLDLPETT 20

RESULT 34
US-09-728-466-1
Sequence 1, Application US/09728466

Patent No. 6641994
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Manxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPETT 9
Db 12 MLDLQPETT 20

RESULT 35
US-09-824-017-4
Sequence 4, Application US/09824017
Patent No. 6649167
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander

TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: POLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017
FILING DATE: 03-Apr-2001
CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.

REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match 100.0%; Score 46; DB 2; Length 98;

Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MLDLQPETT 9
Db 12 MLDLQPETT 20

RESULT 36
US-10-267-311-8
Sequence 8, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPETT 9
Db 12 MLDLQPETT 20

RESULT 37
US-10-201-764-19
Sequence 19, Application US/10201764
Patent No. 6716623

GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/201,764
CURRENT FILING DATE: 2002-07-22

PRIOR APPLICATION NUMBER: US/09/566,420
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPETT 9

Db 12 MLDLOPETT 20

RESULT 38
US-09-637-746-3

; Sequence 3, Application US/09637746
; Patent No. 6727079
; GENERAL INFORMATION:
; APPLICANT: Thorgelsson, Snorri S.
; APPLICANT: Woltach, Joseph T.
; APPLICANT: Zhang, Minghang
; TITLE OF INVENTION: CDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTEI
; TITLE OF INVENTION: PRODUCT
; FILE REFERENCE: 11613.29USM1
; CURRENT APPLICATION NUMBER: US/09/637,746
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: PCT/US99/04142
; PRIOR FILING DATE: 1999-02-25
; PRIOR APPLICATION NUMBER: US 60/079,567
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: US 60/075,922
; PRIOR FILING DATE: 1998-02-25
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-09-637-746-3

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLOPETT 9
Db 12 MLDLOPETT 20

RESULT 39

US-09-501-097A-7
; Sequence 7, Application US/09501097A
; Patent No. 6734173
; GENERAL INFORMATION:
; APPLICANT: Tzyy-Chouu Wu
; APPLICANT: Chien-Fu Hung
; TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
; FILE REFERENCE: 2240-169349
; CURRENT APPLICATION NUMBER: US/09/501,097A
; CURRENT FILING DATE: 2000-02-09
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 98
; TYPE: PRT
; ORGANISM: human papillomavirus
US-09-501-097A-7

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLOPETT 9
Db 12 MLDLOPETT 20

RESULT 40
US-09-980-523A-12
; Sequence 12, Application US/09980523A
; Patent No. 6783763
; GENERAL INFORMATION:

; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOUGAUDT VILADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 AND E7
; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
; FILE REFERENCE: WOBI AO INS
; CURRENT APPLICATION NUMBER: US/09/980,523A
; CURRENT FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: PCT/FR00/01513
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: FR 99/07012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-09-980-523A-12

Query Match 100.0%; Score 46; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLOPETT 9
Db 12 MLDLOPETT 20

RESULT 41

US-09-613-303-12
; Sequence 12, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-12

Query Match 100.0%; Score 46; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLOPETT 9
Db 35 MLDLOPETT 43

RESULT 42
US-10-267-311-12
; Sequence 12, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.

FILE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 12
LENGTH: 121
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-12

Query Match 100.0%; Score 46; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLQPETT 9
|||||
Db 35 MDLQPETT 43

RESULT 43
US-08-860-165-12
Sequence 12, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
PRIOR APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PNO157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 172
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-12

Query Match 100.0%; Score 46; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.32;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLQPETT 9
|||||
Db 110 MDLQPETT 118

RESULT 44
US-09-359-382-12
Sequence 12, Application US/09359382
Patent No. 6306397
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS

FILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PNO157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 172
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-359-382-12

Query Match 100.0%; Score 46; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.32;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLQPETT 9
|||||
Db 110 MDLQPETT 118

RESULT 45
US-09-462-993-2
Sequence 2, Application US/09462993
Patent No. 6884786
GENERAL INFORMATION:
APPLICANT: KIENY, Marie-Paule
APPLICANT: BALLOU, Jean-Marc
APPLICANT: BIZOUARNE, Nadine
TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
TITLE OF INVENTION: POLYPEPTIDE WITH MODIFIED CELL LOCATION
FILE REFERENCE: 01753-122
CURRENT APPLICATION NUMBER: US/09/462,993
CURRENT FILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: PCT/FR98/01576
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: FR 97/09152
PRIOR FILING DATE: 1997-07-18
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.2
SEQ ID NO 2
LENGTH: 185
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derived from human papillomavirus, strain
OTHER INFORMATION: HPV-16, E7 fusion signals of the rabies
OTHER INFORMATION: glycoprotein, clone E7-TMR.
US-09-462-993-2

Query Match 100.0%; Score 46; DB 2; Length 185;
Best Local Similarity 100.0%; Pred. No. 0.34;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLQPETT 9
|||||
Db 37 MDLQPETT 45

RESULT 46
US-09-613-303-35
Sequence 35, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO

```
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 35
LENGTH: 198
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
US-09-613-303-35
```

```
Query Match      100.0%; Score 46; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.37;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      1 MLDLQPERTT 9
         |||||
Db      112 MLDLQPERTT 120
```

```
RESULT 47
US-10-267-311-35
Sequence 35, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizeen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 35
LENGTH: 198
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-35
```

```
Query Match      100.0%; Score 46; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.37;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      1 MLDLQPERTT 9
         |||||
Db      112 MLDLQPERTT 120
```

```
RESULT 48
US-09-485-885-1
Sequence 1, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
```

```
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 1
LENGTH: 220
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-1
```

```
Query Match      100.0%; Score 46; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      1 MLDLQPERTT 9
         |||||
Db      125 MLDLQPERTT 133
```

```
RESULT 49
US-09-485-885-8
Sequence 8, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 8
LENGTH: 220
TYPE: PRT
ORGANISM: Homo sapien
US-09-485-885-8
```

```
Query Match      100.0%; Score 46; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      1 MLDLQPERTT 9
         |||||
Db      125 MLDLQPERTT 133
```

```
RESULT 50
US-09-485-885-12
Sequence 12, Application US/09485885
Patent No. 6342224
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
```

;
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 239
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-12

Query Match 100.0%; Score 46; DB 2; Length 239;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MDLQPETT 9
|||
Db 144 MDLQPETT 152

Search completed: May 5, 2006, 05:36:09
Job time : 25.7 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using SW model

Run on: May 5, 2006, 08:29:07 ; Search time 56 Seconds
(without alignments)
67,151 Million cell updates/sec

Title: US-08-170-344-15
Perfect score: 46
Sequence: 1 MLDIQUERT 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 41782326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Publihed Applications_AA_Main:*
1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
4: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*
6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	46	100.0	9	4	US-10-128-711-71
2	46	100.0	9	4	US-10-777-053-328
3	46	100.0	9	4	US-10-777-053-496
4	46	100.0	9	4	US-10-777-053-913
5	46	100.0	9	4	US-10-837-217-328
6	46	100.0	9	4	US-10-837-217-496
7	46	100.0	9	4	US-10-837-217-913
8	46	100.0	9	5	US-10-484-063-12
9	46	100.0	9	5	US-10-751-845-101
10	46	100.0	9	5	US-10-924-377-7
11	46	100.0	10	3	US-09-847-185-19
12	46	100.0	10	3	US-09-835-853-32
13	46	100.0	10	3	US-09-739-466C-13
14	46	100.0	10	4	US-10-133-210-371
15	46	100.0	10	4	US-10-224-286-19
16	46	100.0	10	4	US-10-177-390-33
17	46	100.0	10	4	US-10-406-317-30
18	46	100.0	10	4	US-10-297-168-30
19	46	100.0	10	4	US-10-777-053-329
20	46	100.0	10	4	US-10-777-053-542
21	46	100.0	10	4	US-10-837-217-329
22	46	100.0	10	4	US-10-837-217-542
23	46	100.0	10	5	US-10-890-526-19
24	46	100.0	10	5	US-10-751-845-105
25	46	100.0	10	5	US-10-776-521B-366
26	46	100.0	10	5	US-10-820-067A-877
27	46	100.0	11	4	US-10-062-710-306

28	46	100.0	15	4	US-10-648-547-72	Sequence 72, App1
29	46	100.0	15	4	US-10-648-547-80	Sequence 80, App1
30	46	100.0	15	4	US-10-648-547-92	Sequence 92, App1
31	46	100.0	15	4	US-10-476-570-45	Sequence 45, App1
32	46	100.0	15	4	US-10-476-570-46	Sequence 46, App1
33	46	100.0	15	4	US-10-306-541-72	Sequence 72, App1
34	46	100.0	15	4	US-10-306-541-80	Sequence 80, App1
35	46	100.0	15	4	US-10-306-541-92	Sequence 92, App1
36	46	100.0	15	5	US-10-751-845-67	Sequence 67, App1
37	46	100.0	20	4	US-10-432-465-44	Sequence 44, App1
38	46	100.0	20	4	US-10-432-465-45	Sequence 45, App1
39	46	100.0	20	4	US-10-476-570-14	Sequence 14, App1
40	46	100.0	20	5	US-10-890-526-69	Sequence 69, App1
41	46	100.0	21	5	US-10-890-526-70	Sequence 70, App1
42	46	100.0	21	5	US-10-476-570-15	Sequence 15, App1
43	46	100.0	21	5	US-10-776-521B-78	Sequence 78, App
44	46	100.0	23	4	US-10-476-570-57	Sequence 57, App1
45	46	100.0	23	5	US-10-858-384-14	Sequence 14, App1
46	46	100.0	30	3	US-09-828-645-3	Sequence 3, App1
47	46	100.0	30	3	US-09-828-645-7	Sequence 7, App1
48	46	100.0	30	5	US-10-827-007-3	Sequence 3, App1
49	46	100.0	30	5	US-10-827-007-7	Sequence 7, App1
50	46	100.0	30	5	US-10-827-083-3	Sequence 3, App1
51	46	100.0	30	5	US-10-827-083-7	Sequence 7, App1
52	46	100.0	31	3	US-09-739-466C-46	Sequence 46, App1
53	46	100.0	98	3	US-09-728-466-1	Sequence 1, App1
54	46	100.0	98	3	US-09-820-765-4	Sequence 4, App1
55	46	100.0	98	3	US-09-824-017-4	Sequence 4, App1
56	46	100.0	98	3	US-09-986-118A-4	Sequence 4, App1
57	46	100.0	98	4	US-10-267-311-8	Sequence 8, App1
58	46	100.0	98	4	US-10-177-390-8	Sequence 8, App1
59	46	100.0	98	4	US-10-201-766-19	Sequence 19, App1
60	46	100.0	98	4	US-10-392-113-29	Sequence 29, App1
61	46	100.0	98	4	US-10-654-128-4	Sequence 4, App1
62	46	100.0	98	4	US-10-681-410-19	Sequence 19, App1
63	46	100.0	98	4	US-10-772-988-3	Sequence 3, App1
64	46	100.0	98	4	US-10-479-541-5	Sequence 5, App1
65	46	100.0	98	5	US-10-042-526A-4	Sequence 4, App1
66	46	100.0	98	5	US-10-657-399-1	Sequence 1, App1
67	46	100.0	98	5	US-10-858-384-12	Sequence 12, App1
68	46	100.0	98	5	US-10-484-063-26	Sequence 26, App1
69	46	100.0	98	5	US-10-343-448-5	Sequence 5, App1
70	46	100.0	98	5	US-10-679-956-8	Sequence 8, App1
71	46	100.0	98	5	US-10-367-057-17	Sequence 17, App1
72	46	100.0	98	6	US-11-077-939-5	Sequence 5, App1
73	46	100.0	99	4	US-10-115-440-7	Sequence 7, App1
74	46	100.0	111	4	US-10-472-724-4	Sequence 4, App1
75	46	100.0	117	5	US-10-751-845-126	Sequence 126, App
76	46	100.0	121	4	US-10-267-311-12	Sequence 12, App1
77	46	100.0	121	5	US-10-679-956-12	Sequence 12, App1
78	46	100.0	185	6	US-11-072-288-2	Sequence 2, App1
79	46	100.0	198	4	US-10-267-311-35	Sequence 35, App1
80	46	100.0	198	5	US-10-679-956-35	Sequence 35, App1
81	46	100.0	220	4	US-10-000-903-1	Sequence 1, App1
82	46	100.0	220	4	US-10-000-903-8	Sequence 8, App1
83	46	100.0	220	5	US-10-899-771-1	Sequence 1, App1
84	46	100.0	220	5	US-10-899-771-8	Sequence 8, App1
85	46	100.0	236	5	US-10-751-845-157	Sequence 157, App
86	46	100.0	237	5	US-10-751-845-158	Sequence 158, App
87	46	100.0	239	4	US-10-000-903-12	Sequence 12, App1
88	46	100.0	239	5	US-10-899-771-12	Sequence 12, App1
89	46	100.0	261	5	US-10-751-845-160	Sequence 160, App1
90	46	100.0	266	3	US-09-367-309A-1	Sequence 1, App1
91	46	100.0	289	4	US-10-115-440-5	Sequence 5, App1
92	46	100.0	295	5	US-10-267-311-33	Sequence 33, App1
93	46	100.0	324	5	US-10-679-956-33	Sequence 33, App1
94	46	100.0	334	5	US-10-267-311-25	Sequence 25, App1
95	46	100.0	334	4	US-10-679-956-25	Sequence 25, App1
96	46	100.0	344	4	US-10-472-724-10	Sequence 10, App1
97	46	100.0	371	4	US-10-000-903-6	Sequence 6, App1
98	46	100.0	390	5	US-10-899-771-16	Sequence 16, App1
99	46	100.0	390	4	US-10-000-903-14	Sequence 14, App1
100	46	100.0	390	5	US-10-899-771-14	Sequence 14, App1

101	46	100.0	421	4	US-10-296-770-7	Sequence 7, Appli	174	34	73.9	2777	4	US-10-220-547-4	Sequence 4, Appli
102	46	100.0	493	4	US-10-267-311-19	Sequence 19, Appl	175	34	73.9	2777	4	US-10-423-483-4	Sequence 4, Appli
103	46	100.0	493	5	US-10-679-956-19	Sequence 19, Appl	176	34	73.9	2777	5	US-10-912-280-4	Sequence 4, Appli
104	46	100.0	639	4	US-10-267-311-17	Sequence 17, Appl	177	34	73.9	3838	4	US-10-262-511-162	Sequence 162, App
105	46	100.0	639	5	US-10-679-956-17	Sequence 17, Appl	178	34	73.9	6304	4	US-10-147-026-16	Sequence 16, Appl
106	46	100.0	641	4	US-10-267-311-51	Sequence 51, Appl	179	33	71.7	104	3	US-09-933-767-334	Sequence 134, App
107	46	100.0	641	5	US-10-679-956-51	Sequence 51, Appl	180	33	71.7	104	4	US-10-004-860-434	Sequence 434, App
108	46	100.0	647	4	US-10-267-311-53	Sequence 53, Appl	181	33	71.7	104	4	US-10-023-282-434	Sequence 434, App
109	46	100.0	647	5	US-10-679-956-53	Sequence 53, Appl	182	33	71.7	324	4	US-10-425-114-50557	Sequence 60557, A
110	46	100.0	648	4	US-10-267-311-29	Sequence 29, Appl	183	33	71.7	333	3	US-09-815-242-11170	Sequence 11170, A
111	46	100.0	648	5	US-10-679-956-29	Sequence 29, Appl	184	33	71.7	333	4	US-10-282-122A-58387	Sequence 58387, A
112	46	100.0	711	4	US-10-267-311-41	Sequence 41, Appl	185	33	71.7	335	4	US-10-282-122A-66984	Sequence 66984, A
113	46	100.0	711	5	US-10-679-956-41	Sequence 41, Appl	186	33	71.7	359	5	US-10-872-762-2	Sequence 2, Appli
114	46	100.0	724	4	US-10-267-311-45	Sequence 45, Appl	187	33	71.7	387	4	US-10-425-115-250457	Sequence 250457, A
115	46	100.0	724	5	US-10-679-956-45	Sequence 45, Appl	188	33	71.7	414	4	US-10-473-670-8	Sequence 8, Appli
116	46	100.0	805	4	US-10-367-095-9	Sequence 9, Appli	189	33	71.7	414	4	US-10-618-941-58	Sequence 98, Appli
117	46	100.0	805	4	US-10-368-046-9	Sequence 9, Appli	190	33	71.7	448	6	US-11-097-143-11320	Sequence 31320, A
118	46	100.0	805	4	US-10-367-367-9	Sequence 9, Appli	191	33	71.7	495	4	US-10-171-311-60	Sequence 60, Appl
119	46	100.0	805	5	US-10-918-337-9	Sequence 9, Appli	192	33	71.7	495	4	US-10-308-448-30	Sequence 30, Appl
120	41	89.1	9	3	US-09-759-960-17	Sequence 17, Appl	193	33	71.7	495	5	US-10-287-436A-613	Sequence 613, App
121	41	89.1	9	3	US-09-891-823-3	Sequence 3, Appli	194	33	71.7	511	4	US-10-369-493-19512	Sequence 19512, A
122	41	89.1	9	3	US-09-909-460-104	Sequence 104, App	195	33	71.7	538	6	US-11-097-143-7314	Sequence 7314, Ap
123	41	89.1	9	4	US-10-128-711-66	Sequence 104, App	196	33	71.7	576	3	US-09-364-847-37	Sequence 37, Appl
124	41	89.1	9	4	US-10-365-908-3	Sequence 66, Appl	197	33	71.7	652	5	US-10-625-972-6	Sequence 6, Appli
125	41	89.1	9	4	US-10-603-062-17	Sequence 3, Appli	198	33	71.7	710	4	US-10-158-057-249	Sequence 249, App
126	41	89.1	9	5	US-10-871-138-3	Sequence 17, Appl	199	33	71.7	712	3	US-09-364-847-39	Sequence 49, Appl
127	41	89.1	9	5	US-10-758-970-104	Sequence 3, Appli	200	33	71.7	712	3	US-09-364-847-51	Sequence 51, Appl
128	41	89.1	9	5	US-10-751-845-58	Sequence 58, Appl	201	33	71.7	847	4	US-10-245-752-94	Sequence 94, Appl
129	41	89.1	9	5	US-10-062-710-228	Sequence 228, App	202	33	71.7	847	4	US-10-245-859-94	Sequence 94, Appl
130	41	89.1	10	4	US-10-476-570-47	Sequence 47, Appl	203	33	71.7	847	4	US-10-245-103-94	Sequence 94, Appl
131	41	89.1	15	4	US-10-484-063-13	Sequence 13, Appl	204	33	71.7	847	4	US-10-245-107-84	Sequence 84, Appl
132	37	80.4	9	5	US-10-751-845-99	Sequence 99, Appl	205	33	71.7	847	4	US-10-245-143-94	Sequence 94, Appl
133	37	80.4	9	5	US-10-425-115-318912	Sequence 103, App	206	33	71.7	847	4	US-10-245-851-94	Sequence 94, Appl
134	37	80.4	161	5	US-10-425-115-318912	Sequence 99, Appl	207	33	71.7	847	4	US-10-245-883-94	Sequence 94, Appl
135	37	80.4	161	4	US-10-425-115-318912	Sequence 17162, A	208	33	71.7	847	4	US-10-237-535-94	Sequence 94, Appl
136	37	80.4	321	4	US-10-367-095-8	Sequence 224979, A	209	33	71.7	847	4	US-10-238-183-94	Sequence 94, Appl
137	36	78.3	488	4	US-10-367-095-8	Sequence 8, Appli	210	33	71.7	847	4	US-10-238-283-94	Sequence 94, Appl
138	36	78.3	488	4	US-10-367-095-8	Sequence 8, Appli	211	33	71.7	847	4	US-10-238-370-94	Sequence 94, Appl
139	36	78.3	488	4	US-10-367-095-8	Sequence 236, App	212	33	71.7	847	4	US-10-245-055-94	Sequence 94, Appl
140	36	78.3	488	4	US-10-367-095-8	Sequence 236, App	213	33	71.7	847	4	US-10-245-147-94	Sequence 94, Appl
141	36	78.3	488	5	US-10-918-337-8	Sequence 8, Appli	214	33	71.7	847	4	US-10-245-147-94	Sequence 94, Appl
142	36	78.3	606	3	US-10-206-576-240	Sequence 240, App	215	33	71.7	847	4	US-10-245-730-94	Sequence 94, Appl
143	36	78.3	606	4	US-10-206-576-240	Sequence 240, App	216	33	71.7	847	4	US-10-245-739-94	Sequence 94, Appl
144	36	78.3	606	5	US-10-912-362-240	Sequence 240, App	217	33	71.7	847	4	US-10-246-210-94	Sequence 94, Appl
145	36	78.3	1223	3	US-09-071-035-236	Sequence 236, App	218	33	71.7	847	4	US-10-239-196-94	Sequence 94, Appl
146	36	78.3	1223	4	US-10-912-362-236	Sequence 236, App	219	33	71.7	847	4	US-10-243-024-94	Sequence 94, Appl
147	36	78.3	1223	5	US-10-912-362-236	Sequence 236, App	220	33	71.7	847	4	US-10-243-409-94	Sequence 94, Appl
148	36	78.3	1301	3	US-09-071-035-234	Sequence 234, App	221	33	71.7	847	4	US-10-245-621-94	Sequence 94, Appl
149	36	78.3	1301	3	US-09-071-035-238	Sequence 238, App	222	33	71.7	847	4	US-10-245-880-94	Sequence 94, Appl
150	36	78.3	1301	3	US-09-071-035-242	Sequence 242, App	223	33	71.7	847	4	US-10-245-033-94	Sequence 94, Appl
151	36	78.3	1301	4	US-10-206-576-234	Sequence 238, App	224	33	71.7	847	4	US-10-243-095-94	Sequence 94, Appl
152	36	78.3	1301	4	US-10-206-576-238	Sequence 238, App	225	33	71.7	847	4	US-10-245-185-94	Sequence 94, Appl
153	36	78.3	1301	5	US-10-206-576-242	Sequence 242, App	226	33	71.7	847	4	US-10-245-427-94	Sequence 94, Appl
154	36	78.3	1301	5	US-10-912-362-234	Sequence 234, App	227	33	71.7	847	4	US-10-245-473-94	Sequence 94, Appl
155	36	78.3	1301	5	US-10-912-362-238	Sequence 238, App	228	33	71.7	847	4	US-10-245-770-94	Sequence 94, Appl
156	36	78.3	1301	5	US-10-912-362-242	Sequence 242, App	229	33	71.7	847	4	US-10-246-976-94	Sequence 94, Appl
157	36	78.3	2780	4	US-10-220-587-2	Sequence 2, Appli	230	33	71.7	847	4	US-10-243-320-94	Sequence 94, Appl
158	36	78.3	2780	5	US-10-423-483-2	Sequence 2, Appli	231	33	71.7	847	4	US-10-243-743-94	Sequence 94, Appl
159	36	78.3	2780	5	US-10-912-280-2	Sequence 20606, A	232	33	71.7	847	4	US-10-242-743-94	Sequence 94, Appl
160	36	78.3	10917	5	US-10-388-566-1034	Sequence 1034, Ap	233	33	71.7	847	4	US-10-242-845-94	Sequence 94, Appl
161	34	73.9	324	5	US-10-733-923-17878	Sequence 17878, A	234	33	71.7	847	4	US-10-237-636-94	Sequence 94, Appl
162	34	73.9	356	4	US-10-357-521-5	Sequence 5, Appli	235	33	71.7	847	4	US-10-238-325-94	Sequence 94, Appl
163	34	73.9	468	3	US-09-746-660A-66	Sequence 66, Appl	236	33	71.7	847	4	US-10-238-346-94	Sequence 94, Appl
164	34	73.9	468	4	US-10-627-476-324	Sequence 324, App	237	33	71.7	847	4	US-10-238-411-94	Sequence 94, Appl
165	34	73.9	646	4	US-10-733-923-2553	Sequence 2553, Ap	238	33	71.7	847	4	US-10-243-425-94	Sequence 94, Appl
166	34	73.9	646	5	US-10-733-923-2555	Sequence 2555, Ap	239	33	71.7	847	4	US-10-243-425-94	Sequence 94, Appl
167	34	73.9	698	5	US-10-733-923-2553	Sequence 2553, Ap	240	33	71.7	847	4	US-10-243-446-94	Sequence 94, Appl
168	34	73.9	1247	5	US-10-733-923-2554	Sequence 2554, Ap	241	33	71.7	847	4	US-10-245-874-94	Sequence 94, Appl
169	34	73.9	1247	5	US-09-738-626-4751	Sequence 4751, Ap	242	33	71.7	847	4	US-10-242-653-94	Sequence 94, Appl
170	34	73.9	1469	4	US-10-494-675-84	Sequence 84, Appl	243	33	71.7	847	4	US-10-243-167-94	Sequence 94, Appl
171	34	73.9	1469	4	US-10-262-511-164	Sequence 164, App	244	33	71.7	847	4	US-10-243-388-94	Sequence 94, Appl
172	34	73.9	2753	4	US-10-262-511-160	Sequence 160, App	245	33	71.7	847	4	US-10-244-947-94	Sequence 94, Appl
173	34	73.9	2753	4	US-10-262-511-166	Sequence 166, App	246	33	71.7	847	4	US-10-244-968-94	Sequence 94, Appl

247	33	71.7	847	4	US-10-244-990-94	Sequence 94, Appl	320	32	69.6	273	4	US-10-425-114-63557	Sequence 63557, A
248	33	71.7	847	4	US-10-245-079-94	Sequence 94, Appl	321	32	69.6	289	4	US-10-299-058-13	Sequence 13, Appl
249	33	71.7	847	4	US-10-245-127-94	Sequence 94, Appl	322	32	69.6	296	4	US-10-299-058-5	Sequence 5, Appl
250	33	71.7	847	4	US-10-245-207-94	Sequence 94, Appl	323	32	69.6	296	4	US-10-299-058-6	Sequence 6, Appl
251	33	71.7	847	4	US-10-245-646-94	Sequence 94, Appl	324	32	69.6	302	4	US-10-425-115-340943	Sequence 340943, A
252	33	71.7	847	4	US-10-245-695-94	Sequence 94, Appl	325	32	69.6	304	4	US-10-072-012-583	Sequence 583, App
253	33	71.7	847	4	US-10-245-699-94	Sequence 94, Appl	326	32	69.6	322	4	US-10-369-493-11978	Sequence 11978, A
254	33	71.7	847	4	US-10-245-737-94	Sequence 94, Appl	327	32	69.6	367	4	US-10-425-115-256685	Sequence 256685, A
255	33	71.7	847	4	US-10-245-878-94	Sequence 94, Appl	328	32	69.6	434	3	US-09-892-877-144	Sequence 144, App
256	33	71.7	847	4	US-10-245-898-94	Sequence 94, Appl	329	32	69.6	434	3	US-09-948-783-146	Sequence 146, App
257	33	71.7	847	4	US-10-245-899-94	Sequence 94, Appl	330	32	69.6	434	3	US-10-050-704-181	Sequence 181, App
258	33	71.7	847	4	US-10-247-058-94	Sequence 94, Appl	331	32	69.6	434	3	US-10-798-512-181	Sequence 28, Appl
259	33	71.7	847	4	US-10-245-454-94	Sequence 94, Appl	332	32	69.6	450	5	US-10-854-299-28	Sequence 28, Appl
260	33	71.7	847	4	US-10-245-454-94	Sequence 94, Appl	333	32	69.6	450	5	US-10-854-299-28	Sequence 28, Appl
261	33	71.7	847	4	US-10-237-471-94	Sequence 94, Appl	334	32	69.6	466	5	US-10-481-022A-174	Sequence 299734, A
262	33	71.7	847	4	US-10-238-261-94	Sequence 94, Appl	335	32	69.6	491	4	US-10-425-115-299714	Sequence 112039, A
263	33	71.7	847	4	US-10-238-324-94	Sequence 94, Appl	336	32	69.6	531	4	US-10-437-963-112039	Sequence 77, Appl
264	33	71.7	847	4	US-10-241-860-94	Sequence 94, Appl	337	32	69.6	548	4	US-10-047-542-77	Sequence 236, App
265	33	71.7	847	4	US-10-242-172-94	Sequence 94, Appl	338	32	69.6	548	4	US-10-047-542-78	Sequence 236, App
266	33	71.7	847	4	US-10-242-652-94	Sequence 94, Appl	339	32	69.6	563	4	US-10-437-963-125580	Sequence 125580, A
267	33	71.7	847	4	US-10-242-652-94	Sequence 94, Appl	340	32	69.6	567	4	US-10-437-963-125591	Sequence 46158, A
268	33	71.7	847	4	US-10-243-023-94	Sequence 94, Appl	341	32	69.6	567	4	US-10-767-701-46158	Sequence 269318, A
269	33	71.7	847	4	US-10-243-103-94	Sequence 94, Appl	342	32	69.6	567	4	US-10-425-115-269318	Sequence 8373, Ap
270	33	71.7	847	4	US-10-243-276-94	Sequence 94, Appl	343	32	69.6	567	5	US-10-739-930-8373	Sequence 125568, A
271	33	71.7	847	4	US-10-243-326-94	Sequence 94, Appl	344	32	69.6	576	4	US-10-425-114-45535	Sequence 45535, A
272	33	71.7	847	4	US-10-243-364-94	Sequence 94, Appl	345	32	69.6	600	4	US-10-481-032A-160	Sequence 160, App
273	33	71.7	847	4	US-10-243-494-94	Sequence 94, Appl	346	32	69.6	629	5	US-10-481-032A-172	Sequence 172, App
274	33	71.7	847	4	US-10-244-995-94	Sequence 94, Appl	347	32	69.6	655	4	US-10-369-493-351	Sequence 351, App
275	33	71.7	847	4	US-10-245-230-94	Sequence 94, Appl	348	32	69.6	655	4	US-10-369-493-351	Sequence 105, App
276	33	71.7	847	4	US-10-245-253-94	Sequence 94, Appl	349	32	69.6	669	3	US-09-809-665A-105	Sequence 125513, A
277	33	71.7	847	4	US-10-245-479-94	Sequence 94, Appl	350	32	69.6	689	5	US-10-854-299-105	Sequence 72659, A
278	33	71.7	847	4	US-10-245-499-94	Sequence 94, Appl	351	32	69.6	719	4	US-10-437-963-125613	Sequence 52827, A
279	33	71.7	847	4	US-10-245-772-94	Sequence 94, Appl	352	32	69.6	723	4	US-10-282-122A-72669	Sequence 17145, A
280	33	71.7	847	4	US-10-245-811-94	Sequence 94, Appl	353	32	69.6	723	4	US-10-282-122A-76150	Sequence 43344, A
281	33	71.7	847	4	US-10-245-812-94	Sequence 94, Appl	354	32	69.6	726	5	US-10-450-763-43344	Sequence 231679, A
282	33	71.7	847	4	US-10-245-852-94	Sequence 94, Appl	355	32	69.6	731	4	US-10-732-923-3322	Sequence 3322, Ap
283	33	71.7	847	4	US-10-245-852-94	Sequence 94, Appl	356	32	69.6	1094	4	US-10-732-923-3322	Sequence 4574, Ap
284	33	71.7	847	4	US-10-245-881-94	Sequence 94, Appl	357	32	69.6	1209	5	US-09-738-626-4574	Sequence 75300, A
285	33	71.7	847	4	US-10-245-911-94	Sequence 94, Appl	358	32	69.6	1274	4	US-10-282-122A-76150	Sequence 76150, A
286	33	71.7	847	4	US-10-245-913-94	Sequence 94, Appl	359	32	69.6	1337	4	US-11-097-143-20607	Sequence 20607, A
287	33	71.7	847	4	US-10-246-080-94	Sequence 94, Appl	360	32	69.6	1398	4	US-10-425-115-231656	Sequence 231656, A
288	33	71.7	847	4	US-10-246-121-94	Sequence 94, Appl	361	32	69.6	1529	4	US-10-282-122A-75300	Sequence 5014, Ap
289	33	71.7	847	4	US-10-246-305-94	Sequence 94, Appl	362	32	69.6	1581	4	US-10-369-493-5014	Sequence 154, App
290	33	71.7	847	4	US-10-246-929-94	Sequence 94, Appl	363	32	69.6	1616	4	US-10-299-058-2	Sequence 2, Appl
291	33	71.7	847	4	US-10-247-036-94	Sequence 94, Appl	364	32	69.6	1816	4	US-10-408-765A-154	Sequence 4, Appl
292	33	71.7	847	4	US-10-243-255-94	Sequence 94, Appl	365	32	69.6	1816	4	US-10-299-058-4	Sequence 4, Appl
293	33	71.7	847	4	US-10-245-810-94	Sequence 94, Appl	366	32	69.6	1816	4	US-10-372-683-4	Sequence 457, App
294	33	71.7	847	4	US-10-245-810-94	Sequence 94, Appl	367	32	69.6	1816	4	US-10-372-683-4	Sequence 231618, A
295	33	71.7	847	4	US-10-246-098-94	Sequence 94, Appl	368	32	69.6	1816	4	US-10-363-616-457	Sequence 11, Appl
296	33	71.7	847	4	US-10-237-496-94	Sequence 94, Appl	369	32	69.6	1816	4	US-10-425-115-231618	Sequence 26, Appl
297	33	71.7	847	4	US-10-242-074-94	Sequence 94, Appl	370	32	69.6	2174	4	US-10-142-515-11	Sequence 106, App
298	33	71.7	847	4	US-10-242-505-94	Sequence 94, Appl	371	32	69.6	2252	4	US-10-983-340A-8	Sequence 8, Appl
299	33	71.7	847	4	US-10-242-574-94	Sequence 94, Appl	372	32	69.6	2252	4	US-10-983-340A-8	Sequence 4, Appl
300	33	71.7	847	4	US-10-243-651-94	Sequence 94, Appl	373	32	69.6	2252	4	US-10-715-065-5	Sequence 26, Appl
301	33	71.7	847	4	US-10-243-282-94	Sequence 94, Appl	374	32	69.6	2252	4	US-09-891-823-26	Sequence 26, Appl
302	33	71.7	847	4	US-10-243-402-94	Sequence 94, Appl	375	32	69.6	2252	4	US-10-365-908-26	Sequence 26, Appl
303	33	71.7	847	4	US-10-243-431-94	Sequence 94, Appl	376	32	69.6	2252	4	US-10-871-138-26	Sequence 106, App
304	33	71.7	847	4	US-10-245-164-94	Sequence 94, Appl	377	32	69.6	2252	4	US-10-751-845-106	Sequence 73, Appl
305	33	71.7	847	4	US-10-244-942-94	Sequence 94, Appl	378	32	69.6	2252	4	US-10-924-377-6	Sequence 239568, A
306	33	71.7	847	4	US-10-197-942-94	Sequence 94, Appl	379	32	69.6	2252	4	US-10-425-115-239568	Sequence 263189, A
307	33	71.7	847	4	US-10-238-196-94	Sequence 94, Appl	380	32	69.6	2252	4	US-10-425-115-251200	Sequence 251200, A
308	33	71.7	847	4	US-10-238-196-94	Sequence 94, Appl	381	32	69.6	2252	4	US-10-425-115-251200	Sequence 236710, A
309	33	71.7	847	4	US-10-245-013-94	Sequence 94, Appl	382	32	69.6	2252	4	US-10-425-115-23683	Sequence 23683, A
310	33	71.7	847	4	US-10-243-923-9931	Sequence 9931, App	383	32	69.6	2252	4	US-10-425-115-23683	Sequence 289806, A
311	33	71.7	847	4	US-10-712-124-100	Sequence 100, App	384	32	69.6	2252	4	US-10-425-115-289806	Sequence 215992, A
312	33	71.7	847	4	US-10-852-335A-176	Sequence 180380, A	385	32	69.6	2252	4	US-10-425-115-289806	Sequence 75, Appl
313	33	69.6	847	4	US-10-437-963-180380	Sequence 3496, Ap	386	32	69.6	2252	4	US-10-425-115-289806	Sequence 81, Appl
314	33	69.6	847	4	US-10-450-763-56884	Sequence 56884, A	387	32	69.6	2252	4	US-10-418-972-81	Sequence 1196, Ap
315	33	69.6	847	4	US-10-425-115-215471	Sequence 215471, A	388	32	69.6	2252	4	US-10-418-972-81	Sequence 217899, A
316	33	69.6	847	4	US-09-764-891-3999	Sequence 3999, Ap	389	32	69.6	2252	4	US-10-418-972-81	Sequence 217899, A
317	33	69.6	847	4	US-10-424-599-275745	Sequence 275745, Ap	390	32	69.6	2252	4	US-10-418-972-81	Sequence 217899, A
318	33	69.6	847	4	US-10-767-701-56830	Sequence 56830, A	391	32	69.6	2252	4	US-10-418-972-81	Sequence 74, Appl
319	33	69.6	847	4	US-10-425-115-320128	Sequence 320128, A	392	32	69.6	2252	4	US-10-418-972-81	Sequence 74, Appl

393	31	67.4	227	4	US-10-418-972-80	Sequence 80, Appl	466	31	67.4	964	6	US-11-007-664-39	Sequence 39, Appl
394	31	67.4	228	4	US-10-418-972-33	Sequence 33, Appl	467	31	67.4	964	6	US-11-007-669-39	Sequence 39, Appl
395	31	67.4	243	4	US-10-097-340-350	Sequence 350, App	468	31	67.4	976	5	US-10-736-149-5042	Sequence 5042, Ap
396	31	67.4	243	6	US-11-050-926-350	Sequence 350, App	469	31	67.4	984	4	US-10-354-358-102	Sequence 102, App
397	31	67.4	248	4	US-10-097-340-351	Sequence 351, App	470	31	67.4	984	4	US-10-116-275-147	Sequence 147, App
398	31	67.4	248	6	US-11-050-926-351	Sequence 351, App	471	31	67.4	984	5	US-10-631-467-804	Sequence 804, App
399	31	67.4	252	4	US-10-097-340-353	Sequence 353, App	472	31	67.4	1074	6	US-11-097-143-9997	Sequence 9997, Ap
400	31	67.4	252	6	US-11-050-926-353	Sequence 353, App	473	31	67.4	1084	4	US-10-437-963-144916	Sequence 144916,
401	31	67.4	255	4	US-10-219-834-25	Sequence 25, App	474	31	67.4	1117	4	US-10-437-963-144917	Sequence 144917,
402	31	67.4	255	4	US-10-311-671-13	Sequence 13, Appl	475	31	67.4	1123	4	US-10-425-114-62713	Sequence 62713, A
403	31	67.4	255	4	US-10-418-972-3	Sequence 3, Appl	476	31	67.4	1140	4	US-10-418-972-83	Sequence 83, Appl
404	31	67.4	255	4	US-10-418-972-5	Sequence 5, Appl	477	31	67.4	1199	4	US-10-156-761-8467	Sequence 8467, Ap
405	31	67.4	255	4	US-10-418-972-7	Sequence 7, Appl	478	31	67.4	1209	5	US-10-626-832-37	Sequence 37, Appl
406	31	67.4	255	4	US-10-418-972-9	Sequence 9, Appl	479	31	67.4	1266	4	US-10-418-972-25	Sequence 25, Appl
407	31	67.4	255	4	US-10-418-972-11	Sequence 11, Appl	480	31	67.4	1266	4	US-10-418-972-82	Sequence 27, Appl
408	31	67.4	255	4	US-10-418-972-13	Sequence 13, Appl	481	31	67.4	1266	4	US-10-418-972-37	Sequence 32, Appl
409	31	67.4	255	4	US-10-418-972-15	Sequence 15, Appl	482	31	67.4	1266	4	US-10-418-972-73	Sequence 73, Appl
410	31	67.4	255	4	US-10-418-972-17	Sequence 17, Appl	483	31	67.4	1266	4	US-10-418-972-79	Sequence 79, Appl
411	31	67.4	255	4	US-10-418-972-19	Sequence 19, Appl	484	31	67.4	1391	6	US-11-097-143-3222	Sequence 3222, Ap
412	31	67.4	255	4	US-10-418-972-21	Sequence 21, Appl	485	31	67.4	1466	4	US-10-437-963-123197	Sequence 123197,
413	31	67.4	255	4	US-10-418-972-23	Sequence 23, Appl	486	31	67.4	1478	5	US-10-732-923-3353	Sequence 3353, Ap
414	31	67.4	255	4	US-10-418-972-28	Sequence 28, Appl	487	31	67.4	1249	3	US-09-866-557A-4	Sequence 4, Appl
415	31	67.4	255	4	US-10-418-972-29	Sequence 29, Appl	488	31	67.4	2249	4	US-09-866-862-4	Sequence 4, Appl
416	31	67.4	255	4	US-10-418-972-30	Sequence 30, Appl	489	31	67.4	2249	4	US-10-055-797-4	Sequence 4, Appl
417	31	67.4	255	4	US-10-418-972-31	Sequence 31, Appl	490	31	67.4	2249	4	US-10-350-798-4	Sequence 4, Appl
418	31	67.4	255	4	US-10-418-972-57	Sequence 57, Appl	491	31	67.4	2249	6	US-11-097-143-9723	Sequence 9723, Ap
419	31	67.4	255	4	US-10-418-972-82	Sequence 82, Appl	492	31	67.4	3647	4	US-10-437-963-119793	Sequence 119793,
420	31	67.4	255	6	US-11-100-583-13	Sequence 13, Appl	493	31	67.4	6815	6	US-11-097-143-37225	Sequence 37225, A
421	31	67.4	257	5	US-10-732-923-2513	Sequence 2513, Ap	494	30	65.2	35	4	US-10-231-417-559	Sequence 559, App
422	31	67.4	267	4	US-10-097-340-355	Sequence 355, App	495	30	65.2	35	4	US-10-335-057A-41	Sequence 41, Appl
423	31	67.4	267	6	US-11-050-926-355	Sequence 355, App	496	30	65.2	37	4	US-10-335-057A-36	Sequence 36, Appl
424	31	67.4	282	4	US-10-437-963-144914	Sequence 144914,	497	30	65.2	42	3	US-09-864-761-45400	Sequence 45400, A
425	31	67.4	315	4	US-10-425-114-70048	Sequence 70048, A	498	30	65.2	52	4	US-10-425-115-263128	Sequence 263128,
426	31	67.4	324	4	US-10-424-599-246775	Sequence 246775,	499	30	65.2	57	3	US-09-832-129-51	Sequence 51, Appl
427	31	67.4	328	4	US-10-767-701-38418	Sequence 38418, A	500	30	65.2	57	3	US-09-832-245-2241	Sequence 2241, Ap
428	31	67.4	330	4	US-10-371-701-19	Sequence 19, Appl	501	30	65.2	57	4	US-10-733-368-51	Sequence 51, Appl
429	31	67.4	330	4	US-10-371-701-25	Sequence 25, Appl	502	30	65.2	62	4	US-10-424-599-447589	Sequence 447589,
430	31	67.4	337	4	US-10-389-566-1786	Sequence 1786, Ap	503	30	65.2	70	4	US-10-767-701-47472	Sequence 47472, A
431	31	67.4	337	5	US-10-732-923-17923	Sequence 17923, A	504	30	65.2	82	4	US-10-437-963-136704	Sequence 136704,
432	31	67.4	341	4	US-10-425-115-231688	Sequence 231688,	505	30	65.2	82	3	US-09-864-408A-5754	Sequence 5754, Ap
433	31	67.4	364	4	US-10-424-599-147395	Sequence 147395,	506	30	65.2	89	4	US-10-425-115-335656	Sequence 335656,
434	31	67.4	387	4	US-10-104-047-2534	Sequence 2534, Ap	507	30	65.2	94	4	US-10-156-761-9420	Sequence 9420, Ap
435	31	67.4	390	5	US-10-450-763-60652	Sequence 60652, A	508	30	65.2	98	4	US-10-425-115-433608	Sequence 433608,
436	31	67.4	398	5	US-10-495-455-20	Sequence 20, Appl	509	30	65.2	100	4	US-10-424-599-155139	Sequence 155139,
437	31	67.4	398	5	US-10-495-455-32	Sequence 32, Appl	510	30	65.2	101	3	US-09-864-408A-6514	Sequence 6514, Ap
438	31	67.4	404	4	US-10-320-797-3140	Sequence 3140, Ap	511	30	65.2	116	4	US-10-437-963-128773	Sequence 128773,
439	31	67.4	437	4	US-10-425-114-44447	Sequence 44447, A	512	30	65.2	121	3	US-09-764-868-838	Sequence 838, App
440	31	67.4	452	4	US-10-437-963-203614	Sequence 203614,	513	30	65.2	121	3	US-09-764-875-780	Sequence 780, App
441	31	67.4	458	4	US-10-425-115-251196	Sequence 251196,	514	30	65.2	136	4	US-10-424-599-125394	Sequence 125394,
442	31	67.4	465	5	US-10-658-232-11	Sequence 11, Appl	515	30	65.2	140	4	US-10-226-115-986	Sequence 986, App
443	31	67.4	470	4	US-10-389-566-1043	Sequence 1043, Ap	516	30	65.2	140	5	US-10-965-898-6	Sequence 6, Appl
444	31	67.4	487	4	US-10-437-963-177542	Sequence 177542,	517	30	65.2	147	3	US-09-738-626-1146	Sequence 4146, Ap
445	31	67.4	493	31	US-10-437-963-186380	Sequence 186380,	518	30	65.2	149	4	US-10-437-963-142946	Sequence 142946,
446	31	67.4	501	3	US-09-323-9989D-55	Sequence 55, Appl	519	30	65.2	155	3	US-09-783-320-26	Sequence 26, Appl
447	31	67.4	515	4	US-10-425-114-40728	Sequence 40728, A	520	30	65.2	171	4	US-10-106-698-4320	Sequence 4320, Ap
448	31	67.4	531	4	US-10-424-599-190122	Sequence 190122,	521	30	65.2	171	4	US-10-231-417-557	Sequence 557, App
449	31	67.4	533	4	US-10-424-599-215899	Sequence 215899,	522	30	65.2	171	4	US-10-291-172-375	Sequence 375, App
450	31	67.4	562	4	US-10-369-493-6784	Sequence 6784, Ap	523	30	65.2	184	4	US-10-221-278-775	Sequence 278, Ap
451	31	67.4	585	5	US-10-489-425-46	Sequence 46, Appl	524	30	65.2	184	3	US-09-783-320-28	Sequence 28, Appl
452	31	67.4	595	5	US-10-658-232-17	Sequence 17, Appl	525	30	65.2	195	3	US-09-783-320-4	Sequence 32, Appl
453	31	67.4	637	6	US-10-270-333-168	Sequence 168, App	526	30	65.2	211	3	US-09-783-320-42	Sequence 42, Appl
454	31	67.4	637	6	US-11-097-143-33003	Sequence 33003, A	527	30	65.2	224	3	US-09-783-320-36	Sequence 36, Appl
455	31	67.4	845	3	US-09-815-242-5433	Sequence 5433, Ap	528	30	65.2	227	4	US-10-425-114-18396	Sequence 38396, A
456	31	67.4	867	3	US-09-815-242-10654	Sequence 10654, A	529	30	65.2	232	5	US-10-458-127-181	Sequence 181, App
457	31	67.4	867	3	US-10-282-122A-56991	Sequence 56931, A	530	30	65.2	240	4	US-09-783-320-44	Sequence 44, Appl
458	31	67.4	869	3	US-09-815-242-12266	Sequence 12266,	531	30	65.2	260	4	US-10-437-963-125687	Sequence 125687,
459	31	67.4	869	4	US-10-282-122A-44444	Sequence 44484, A	532	30	65.2	266	4	US-10-050-882-138	Sequence 138, App
460	31	67.4	882	5	US-10-732-923-7045	Sequence 7045, Ap	533	30	65.2	266	5	US-10-963-903-138	Sequence 128, App
461	31	67.4	924	4	US-10-425-115-35816	Sequence 358126,	534	30	65.2	274	5	US-10-888-805-24	Sequence 24, Appl
462	31	67.4	952	4	US-10-424-599-248111	Sequence 248111,	535	30	65.2	274	5	US-10-888-805-26	Sequence 26, Appl
463	31	67.4	964	5	US-10-933-206-39	Sequence 39, Appl	536	30	65.2	281	4	US-10-437-963-170119	Sequence 170319,
464	31	67.4	964	6	US-11-004-053-39	Sequence 39, Appl	537	30	65.2	281	4	US-10-424-599-192043	Sequence 192043,
465	31	67.4	964	6	US-11-007-643-39	Sequence 39, Appl	538	30	65.2	283	5	US-10-888-805-28	Sequence 28, Appl

539	30	65.2	283	5	US-10-888-805-30	Sequence 30, Appl	612	30	65.2	715	4	US-10-282-122A-67521	Sequence 67521, A
540	30	65.2	283	5	US-10-888-805-32	Sequence 32, Appl	613	30	65.2	719	4	US-10-425-114-70174	Sequence 70174, A
541	30	65.2	283	5	US-10-888-805-34	Sequence 34, Appl	614	30	65.2	768	4	US-10-437-963-13946	Sequence 13946, A
542	30	65.2	296	3	US-09-883-320-32	Sequence 32, Appl	615	30	65.2	769	4	US-10-369-493-8751	Sequence 8751, Ap
543	30	65.2	298	4	US-10-628-088-390	Sequence 390, App	616	30	65.2	776	4	US-10-425-115-32963	Sequence 32963, A
544	30	65.2	298	4	US-10-842-032-8	Sequence 8, Appl	617	30	65.2	780	4	US-10-282-122A-60861	Sequence 60861, A
545	30	65.2	298	5	US-09-783-320-40	Sequence 40, Appl	618	30	65.2	789	4	US-10-437-963-17995	Sequence 17995, A
546	30	65.2	336	3	US-10-389-566-1837	Sequence 1837, Ap	619	30	65.2	799	4	US-10-437-963-18692	Sequence 18692, A
547	30	65.2	336	5	US-10-732-923-17906	Sequence 17906, A	620	30	65.2	864	4	US-10-282-122A-58165	Sequence 58165, A
548	30	65.2	336	5	US-10-732-923-17913	Sequence 17913, A	621	30	65.2	896	4	US-10-205-342-27	Sequence 27, Appl
549	30	65.2	343	4	US-10-408-765A-2922	Sequence 2922, Ap	622	30	65.2	901	4	US-10-437-963-127073	Sequence 127073, A
550	30	65.2	347	4	US-10-732-923-4506	Sequence 4506, Ap	623	30	65.2	902	4	US-10-489-372-16	Sequence 372, Appl
551	30	65.2	347	5	US-10-732-923-4507	Sequence 4507, Ap	624	30	65.2	902	5	US-10-473-127-976	Sequence 976, App
552	30	65.2	347	5	US-10-732-923-4508	Sequence 4508, Ap	625	30	65.2	902	5	US-10-473-127-976	Sequence 976, App
553	30	65.2	347	6	US-11-097-143-10350	Sequence 10350, A	626	30	65.2	907	5	US-10-473-127-972	Sequence 974, App
554	30	65.2	352	3	US-09-783-320-48	Sequence 48, Appl	627	30	65.2	907	5	US-10-473-127-972	Sequence 974, App
555	30	65.2	357	4	US-10-282-122A-64960	Sequence 64960, A	628	30	65.2	907	5	US-10-723-860-3754	Sequence 3754, Ap
556	30	65.2	365	4	US-10-411-910A-81	Sequence 81, Appl	629	30	65.2	907	5	US-10-756-149-5653	Sequence 5653, Ap
557	30	65.2	366	4	US-10-425-114-52567	Sequence 52567, A	630	30	65.2	907	5	US-10-756-149-5653	Sequence 5653, Ap
558	30	65.2	369	4	US-10-424-599-209179	Sequence 209179, A	631	30	65.2	932	4	US-10-282-122A-69195	Sequence 69195, A
559	30	65.2	385	4	US-10-425-115-283067	Sequence 283067, A	632	30	65.2	932	4	US-10-933-206-40	Sequence 206, Appl
560	30	65.2	391	4	US-10-344-738-31	Sequence 31, Appl	633	30	65.2	956	6	US-11-007-643-40	Sequence 40, Appl
561	30	65.2	394	5	US-10-450-763-38365	Sequence 38365, A	634	30	65.2	956	6	US-11-007-643-40	Sequence 40, Appl
562	30	65.2	399	4	US-10-91-172-751	Sequence 751, App	635	30	65.2	956	6	US-11-007-643-40	Sequence 40, Appl
563	30	65.2	399	4	US-10-221-278-751	Sequence 751, App	636	30	65.2	956	6	US-11-007-643-40	Sequence 40, Appl
564	30	65.2	403	4	US-10-437-963-119422	Sequence 119422, A	637	30	65.2	996	4	US-10-425-115-316580	Sequence 316580, A
565	30	65.2	428	4	US-10-425-115-315201	Sequence 315201, A	638	30	65.2	999	4	US-10-425-115-316582	Sequence 316582, A
566	30	65.2	461	4	US-10-104-047-2367	Sequence 2367, Ap	639	30	65.2	1002	4	US-10-437-963-13545	Sequence 13545, A
567	30	65.2	464	3	US-09-815-242-10647	Sequence 10647, A	640	30	65.2	1086	5	US-10-723-860-3170	Sequence 3170, Ap
568	30	65.2	464	4	US-10-882-122A-42561	Sequence 42561, A	641	30	65.2	1086	5	US-10-723-860-3170	Sequence 3170, Ap
569	30	65.2	467	3	US-09-815-242-4997	Sequence 4997, Ap	642	30	65.2	1335	4	US-10-756-149-5574	Sequence 5574, Ap
570	30	65.2	498	4	US-10-369-493-6415	Sequence 6415, Ap	643	30	65.2	1335	4	US-10-238-079-941	Sequence 941, App
571	30	65.2	503	4	US-10-092-900A-54	Sequence 54, Appl	644	30	65.2	1335	4	US-10-238-079-941	Sequence 941, App
572	30	65.2	503	5	US-10-450-763-46936	Sequence 46936, A	645	30	65.2	1335	4	US-10-667-891-3	Sequence 3, Appl
573	30	65.2	505	3	US-09-729-995-2	Sequence 2, Appl	646	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
574	30	65.2	505	3	US-09-729-995-4	Sequence 4, Appl	647	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
575	30	65.2	505	4	US-10-135-689-2	Sequence 2, Appl	648	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
576	30	65.2	505	4	US-10-135-689-4	Sequence 4, Appl	649	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
577	30	65.2	505	4	US-10-333-314-19	Sequence 19, Appl	650	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
578	30	65.2	505	4	US-10-092-900A-56	Sequence 56, Appl	651	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
579	30	65.2	505	4	US-10-690-617-2	Sequence 2, Appl	652	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
580	30	65.2	505	4	US-10-690-617-4	Sequence 4, Appl	653	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
581	30	65.2	505	5	US-10-981-461-2	Sequence 2, Appl	654	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
582	30	65.2	505	5	US-10-981-461-4	Sequence 4, Appl	655	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
583	30	65.2	505	5	US-10-981-678-2	Sequence 2, Appl	656	30	65.2	1335	4	US-10-807-466-3	Sequence 3, Appl
584	30	65.2	505	5	US-10-981-678-4	Sequence 4, Appl	657	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
585	30	65.2	513	4	US-10-168-582-2	Sequence 2, Appl	658	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
586	30	65.2	520	3	US-09-783-320-30	Sequence 30, Appl	659	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
587	30	65.2	542	4	US-10-094-749-3093	Sequence 3093, Ap	660	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
588	30	65.2	543	4	US-10-092-900A-58	Sequence 58, Appl	661	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
589	30	65.2	548	4	US-10-128-714-3127	Sequence 3127, Ap	662	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
590	30	65.2	552	4	US-10-282-122A-62265	Sequence 62265, A	663	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
591	30	65.2	555	4	US-10-128-714-8127	Sequence 8127, Ap	664	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
592	30	65.2	560	3	US-09-783-320-38	Sequence 38, Appl	665	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
593	30	65.2	561	3	US-09-922-138-8	Sequence 8, Appl	666	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
594	30	65.2	561	3	US-09-922-138-8	Sequence 8, Appl	667	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
595	30	65.2	561	3	US-09-922-138-8	Sequence 8, Appl	668	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
596	30	65.2	563	5	US-10-732-923-1947	Sequence 1947, Ap	669	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
597	30	65.2	563	5	US-10-732-923-1947	Sequence 1947, Ap	670	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
598	30	65.2	568	4	US-10-437-963-119420	Sequence 119420, A	671	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
599	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	672	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
600	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	673	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
601	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	674	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
602	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	675	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
603	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	676	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
604	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	677	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
605	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	678	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
606	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	679	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
607	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	680	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
608	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	681	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
609	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	682	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
610	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	683	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl
611	30	65.2	576	3	US-09-783-320-46	Sequence 46, Appl	684	29	63.0	10625	5	US-10-946-647-68	Sequence 58, Appl

685	29	63.0	129	4	US-10-029-386-29544	Sequence 29544, A	758	29	63.0	411	4	US-10-369-493-18665	Sequence 18665, A
686	29	63.0	129	5	US-10-915-490-29	Sequence 29, Appl	759	29	63.0	411	5	US-10-732-923-18247	Sequence 18247, A
687	29	63.0	130	3	US-09-805-290A-19	Sequence 19, Appl	760	29	63.0	413	5	US-10-236-027-1308	Sequence 1308, Ap
688	29	63.0	130	3	US-09-805-290A-26	Sequence 26, Appl	761	29	63.0	413	5	US-10-783-528-87	Sequence 87, Appl
689	29	63.0	130	4	US-10-767-701-38548	Sequence 38548, A	762	29	63.0	422	4	US-10-289-757-69	Sequence 69, Appl
690	29	63.0	137	5	US-10-450-763-56698	Sequence 56698, A	763	29	63.0	422	5	US-10-955-745-69	Sequence 69, Appl
691	29	63.0	147	4	US-10-767-701-43888	Sequence 43888, A	764	29	63.0	423	5	US-10-484-148-8	Sequence 1, Appl
692	29	63.0	153	3	US-09-764-868-887	Sequence 887, App	765	29	63.0	424	4	US-10-044-442-1	Sequence 8, Appl
693	29	63.0	167	5	US-10-450-763-36855	Sequence 36855, A	766	29	63.0	425	3	US-09-930-317-2	Sequence 2, Appl
694	29	63.0	168	4	US-10-425-115-362505	Sequence 362505, A	767	29	63.0	425	3	US-09-923-922-8	Sequence 8, Appl
695	29	63.0	169	4	US-10-425-114-44892	Sequence 44892, A	768	29	63.0	425	3	US-09-601-534-5	Sequence 5, Appl
696	29	63.0	172	4	US-10-029-386-32917	Sequence 32917, A	769	29	63.0	425	4	US-10-156-761-13421	Sequence 13421, A
697	29	63.0	174	6	US-11-008-354-10	Sequence 10, Appl	770	29	63.0	425	4	US-10-299-886-2	Sequence 2, Appl
698	29	63.0	174	6	US-11-107-597-10	Sequence 10, Appl	771	29	63.0	425	4	US-10-308-229-46	Sequence 46, Appl
699	29	63.0	184	5	US-10-644-765-265	Sequence 265, App	772	29	63.0	425	4	US-10-390-553-8	Sequence 8, Appl
700	29	63.0	185	4	US-10-425-115-202657	Sequence 202657, A	773	29	63.0	425	4	US-10-648-593-198	Sequence 198, App
701	29	63.0	197	4	US-10-425-115-363076	Sequence 363076, A	774	29	63.0	431	5	US-10-732-923-3324	Sequence 3324, Ap
702	29	63.0	199	5	US-10-644-765-188	Sequence 363076, A	775	29	63.0	432	4	US-10-108-260A-3309	Sequence 3309, Ap
703	29	63.0	212	5	US-10-732-923-21556	Sequence 21556, A	776	29	63.0	432	6	US-11-097-143-6141	Sequence 6141, Ap
704	29	63.0	215	6	US-11-013-314-14	Sequence 14, Appl	777	29	63.0	438	4	US-10-267-592-419	Sequence 419, App
705	29	63.0	215	6	US-11-097-143-27639	Sequence 27639, A	778	29	63.0	438	6	US-11-097-152-12366	Sequence 12366, A
706	29	63.0	215	6	US-11-097-143-27642	Sequence 27642, A	779	29	63.0	438	6	US-11-097-143-28833	Sequence 28833, A
707	29	63.0	215	6	US-11-097-143-37719	Sequence 37719, A	780	29	63.0	442	5	US-10-501-282-6308	Sequence 6308, Ap
708	29	63.0	223	4	US-10-424-599-189178	Sequence 189178, A	781	29	63.0	447	4	US-10-767-701-45219	Sequence 45219, A
709	29	63.0	224	4	US-10-767-701-36229	Sequence 36229, A	782	29	63.0	450	4	US-10-767-701-43724	Sequence 43724, A
710	29	63.0	225	4	US-10-424-599-194013	Sequence 194013, A	783	29	63.0	451	5	US-10-866-089-8	Sequence 8, Appl
711	29	63.0	226	4	US-10-437-963-18186	Sequence 18186, A	784	29	63.0	451	5	US-10-501-282-63310	Sequence 6310, Ap
712	29	63.0	230	4	US-10-767-701-35463	Sequence 35463, A	785	29	63.0	453	5	US-10-501-282-63312	Sequence 6312, Ap
713	29	63.0	235	4	US-10-369-493-5138	Sequence 5138, Ap	786	29	63.0	467	3	US-09-923-922-7	Sequence 7, Appl
714	29	63.0	238	4	US-10-425-114-53749	Sequence 53749, A	787	29	63.0	467	3	US-09-601-534-4	Sequence 4, Appl
715	29	63.0	239	4	US-10-389-647-594	Sequence 594, App	788	29	63.0	467	4	US-10-095-492-15	Sequence 15, Appl
716	29	63.0	246	4	US-10-369-493-10772	Sequence 10772, A	789	29	63.0	467	4	US-10-119-099-2	Sequence 2, Appl
717	29	63.0	253	4	US-10-282-122A-74595	Sequence 74595, A	790	29	63.0	467	4	US-10-119-099-15	Sequence 15, Appl
718	29	63.0	264	4	US-10-784-880-54	Sequence 54, Appl	791	29	63.0	467	4	US-10-044-442-2	Sequence 2, Appl
719	29	63.0	267	4	US-10-425-114-66579	Sequence 66579, A	792	29	63.0	467	4	US-10-044-442-5	Sequence 5, Appl
720	29	63.0	270	4	US-10-425-115-202889	Sequence 202889, A	793	29	63.0	467	4	US-10-282-122A-50781	Sequence 50781, A
721	29	63.0	270	4	US-10-289-762-8920	Sequence 820, App	794	29	63.0	467	4	US-10-390-553-7	Sequence 7, Appl
722	29	63.0	280	4	US-10-425-114-53205	Sequence 53205, A	795	29	63.0	469	4	US-10-425-114-57769	Sequence 57769, A
723	29	63.0	284	4	US-10-156-761-10299	Sequence 10299, A	796	29	63.0	475	6	US-10-424-599-669103	Sequence 269103, A
724	29	63.0	294	4	US-09-738-626-3973	Sequence 3973, Ap	797	29	63.0	475	6	US-11-007-819-20	Sequence 20, Appl
725	29	63.0	294	6	US-11-006-098-290	Sequence 290, App	798	29	63.0	478	4	US-10-282-122A-78456	Sequence 78456, A
726	29	63.0	295	4	US-10-425-115-191488	Sequence 191488, A	799	29	63.0	484	4	US-10-282-122A-78456	Sequence 78456, A
727	29	63.0	305	4	US-10-425-114-42456	Sequence 42456, A	800	29	63.0	484	5	US-10-732-923-19732	Sequence 19732, A
728	29	63.0	306	4	US-10-282-122A-43708	Sequence 43708, A	801	29	63.0	489	4	US-10-437-963-145651	Sequence 145651, A
729	29	63.0	310	6	US-11-007-819-39	Sequence 39, Appl	802	29	63.0	509	4	US-10-437-963-110395	Sequence 110395, A
730	29	63.0	316	4	US-10-282-122A-73778	Sequence 73778, A	803	29	63.0	511	4	US-10-282-122A-59509	Sequence 59509, A
731	29	63.0	320	4	US-10-425-115-274892	Sequence 274892, A	804	29	63.0	512	5	US-10-732-923-19731	Sequence 19731, A
732	29	63.0	322	3	US-09-738-626-6911	Sequence 6911, Ap	805	29	63.0	525	4	US-10-378-029-58	Sequence 58, Appl
733	29	63.0	334	5	US-10-723-860-3174	Sequence 3174, Ap	806	29	63.0	525	4	US-10-788-792-220	Sequence 220, App
734	29	63.0	339	4	US-10-029-386-32179	Sequence 32179, A	807	29	63.0	535	4	US-10-087-192-2007	Sequence 2007, App
735	29	63.0	340	4	US-10-369-493-20437	Sequence 20437, A	808	29	63.0	536	4	US-10-369-493-40832	Sequence 40832, A
736	29	63.0	341	4	US-10-425-115-202891	Sequence 202891, A	809	29	63.0	536	4	US-10-437-963-162720	Sequence 162720, A
737	29	63.0	343	4	US-10-282-122A-50031	Sequence 50031, A	810	29	63.0	537	5	US-10-732-923-13746	Sequence 13746, A
738	29	63.0	346	6	US-11-008-354-8	Sequence 8, Appl	811	29	63.0	538	5	US-10-732-923-13733	Sequence 13733, A
739	29	63.0	346	6	US-11-107-597-8	Sequence 8, Appl	812	29	63.0	542	5	US-10-732-923-13745	Sequence 13745, A
740	29	63.0	349	4	US-10-282-122A-49298	Sequence 49298, A	813	29	63.0	548	4	US-10-282-122A-44425	Sequence 44425, A
741	29	63.0	352	5	US-10-989-891-136	Sequence 136, App	814	29	63.0	569	4	US-10-156-761-12273	Sequence 12273, A
742	29	63.0	368	4	US-10-369-493-17473	Sequence 17473, A	815	29	63.0	572	4	US-10-425-114-59378	Sequence 59378, A
743	29	63.0	368	5	US-10-732-923-11847	Sequence 11847, A	816	29	63.0	587	3	US-09-815-242-10960	Sequence 10960, A
744	29	63.0	375	4	US-10-424-599-234587	Sequence 234587, A	817	29	63.0	587	4	US-10-260-877-26	Sequence 26, Appl
745	29	63.0	382	4	US-10-369-493-13640	Sequence 13640, A	818	29	63.0	587	4	US-10-282-122A-58663	Sequence 58663, A
746	29	63.0	386	4	US-10-012-697-1539	Sequence 1539, Ap	819	29	63.0	588	4	US-10-369-493-17841	Sequence 17841, A
747	29	63.0	386	5	US-10-779-543-23539	Sequence 23539, A	820	29	63.0	601	4	US-10-369-493-130849	Sequence 130849, A
748	29	63.0	387	4	US-10-114-893-133	Sequence 133, App	821	29	63.0	609	5	US-10-450-763-56333	Sequence 56333, A
749	29	63.0	387	4	US-10-016-249-2	Sequence 2, Appl	822	29	63.0	620	4	US-10-104-047-2045	Sequence 2045, Ap
750	29	63.0	389	4	US-10-369-493-4934	Sequence 4934, Ap	823	29	63.0	623	5	US-10-732-923-7091	Sequence 7091, Ap
751	29	63.0	389	4	US-10-369-493-7692	Sequence 7692, Ap	824	29	63.0	631	4	US-10-295-027-1307	Sequence 1307, Ap
752	29	63.0	395	5	US-10-450-763-38031	Sequence 38031, A	825	29	63.0	631	5	US-10-783-528-88	Sequence 88, Appl
753	29	63.0	395	5	US-10-450-763-49109	Sequence 49109, A	826	29	63.0	642	5	US-10-617-320-4944	Sequence 4944, Ap
754	29	63.0	401	4	US-10-195-144-27	Sequence 27, Appl	827	29	63.0	652	4	US-10-156-761-12133	Sequence 12133, A
755	29	63.0	401	4	US-10-345-072-27	Sequence 27, Appl	828	29	63.0	655	4	US-10-369-493-3656	Sequence 3656, Ap
756	29	63.0	407	4	US-10-238-075-725	Sequence 725, App	829	29	63.0	657	4	US-10-437-963-137298	Sequence 137298, A
757	29	63.0	410	4	US-10-238-075-1226	Sequence 1226, App	830	29	63.0	661	5	US-10-450-763-60620	Sequence 60620, A

831	29	63.0	663	5	US-10-625-972-7	Sequence 7, Appl	904	29	63.0	1616	4	US-10-282-122A-63593	Sequence 63593, A
832	29	63.0	663	5	US-10-946-647-1369	Sequence 1369, Ap	905	29	63.0	1739	4	US-10-154-086-19	Sequence 18107, A
833	29	63.0	663	5	US-10-946-647-1385	Sequence 1385, Ap	906	29	63.0	1842	6	US-10-732-923-18307	Sequence 37056, A
834	29	63.0	663	5	US-10-946-647-1392	Sequence 1392, Ap	907	29	63.0	1895	6	US-11-097-143-37056	Sequence 2, Appl
835	29	63.0	663	5	US-10-946-647-1398	Sequence 1398, Ap	908	29	63.0	1924	3	US-09-866-557A-2	Sequence 2, Appl
836	29	63.0	668	5	US-09-812-350-24	Sequence 24, Appl	909	29	63.0	1924	3	US-09-866-862-2	Sequence 2, Appl
837	29	63.0	668	5	US-10-732-923-6844	Sequence 6844, Ap	910	29	63.0	1924	4	US-10-055-797-2	Sequence 2, Appl
838	29	63.0	682	4	US-10-238-075-1077	Sequence 1077, Ap	911	29	63.0	1924	4	US-10-350-799-2	Sequence 5660, Ap
839	29	63.0	682	5	US-10-946-647-1418	Sequence 1418, Ap	912	29	63.0	2163	4	US-10-369-493-5660	Sequence 2076, Ap
840	29	63.0	685	4	US-10-731-741-22	Sequence 22, Appl	913	29	63.0	2519	5	US-10-408-765A-2075	Sequence 20568, A
841	29	63.0	686	4	US-10-417-719-25	Sequence 25, Appl	914	29	63.0	2519	5	US-10-732-923-20568	Sequence 50, Appl
842	29	63.0	686	4	US-10-417-719-40	Sequence 40, Appl	915	29	63.0	2808	4	US-10-210-281-50	Sequence 3046, Ap
843	29	63.0	686	4	US-10-417-719-42	Sequence 42, Appl	916	29	63.0	2808	5	US-10-723-860-3046	Sequence 273, App
844	29	63.0	686	4	US-10-417-719-44	Sequence 44, Appl	917	29	63.0	4292	4	US-10-080-334-273	Sequence 47419, A
845	29	63.0	686	4	US-10-417-719-46	Sequence 46, Appl	918	29	63.0	4292	5	US-10-450-763-47419	Sequence 90, Appl
846	29	63.0	686	4	US-10-731-741-7	Sequence 7, Appl	919	29	63.0	4302	4	US-10-080-334-90	Sequence 271, App
847	29	63.0	682	4	US-10-437-963-144927	Sequence 144927, A	920	29	63.0	4302	4	US-10-080-334-271	Sequence 272, App
848	29	63.0	682	6	US-11-097-143-17571	Sequence 17571, A	921	29	63.0	4302	5	US-10-080-334-272	Sequence 171, App
849	29	63.0	701	4	US-10-424-599-238593	Sequence 238593, A	922	29	63.0	4303	4	US-10-411-915-171	Sequence 2, Appl
850	29	63.0	709	3	US-09-815-242-13349	Sequence 13349, A	923	29	63.0	4303	3	US-09-904-968A-2	Sequence 274, App
851	29	63.0	711	4	US-10-161-051-137	Sequence 137, App	924	29	63.0	4303	3	US-10-080-334-274	Sequence 2568, Ap
852	29	63.0	711	4	US-10-437-963-168003	Sequence 168003, A	925	29	63.0	4520	6	US-11-097-143-2568	Sequence 8219, Ap
853	29	63.0	715	4	US-10-282-122A-73916	Sequence 73916, A	926	29	63.0	5029	5	US-10-732-923-8219	Sequence 23, Appl
854	29	63.0	715	5	US-10-472-828-1768	Sequence 1768, Ap	927	29	63.0	10203	4	US-10-661-809-23	Sequence 4098, Ap
855	29	63.0	719	4	US-10-072-036-75	Sequence 75, Appl	928	29	63.0	11088	4	US-10-724-972A-4098	Sequence 7, Appl
856	29	63.0	719	4	US-10-072-036-51	Sequence 51, Appl	929	29	63.0	11096	4	US-10-203-295-7	Sequence 20557, A
857	29	63.0	721	4	US-10-425-115-195588	Sequence 195588, A	930	29	63.0	11096	4	US-10-732-923-20557	Sequence 247, App
858	29	63.0	722	4	US-10-437-963-139182	Sequence 139182, A	931	29	60.9	18	4	US-10-057-789-247	Sequence 247, App
859	29	63.0	711	4	US-10-661-809-6	Sequence 6, Appl	932	29	60.9	23	4	US-10-212-628-247	Sequence 61, Appl
860	29	63.0	758	4	US-10-289-762-996	Sequence 966, App	933	29	60.9	23	4	US-10-346-162-61	Sequence 250, App
861	29	63.0	777	4	US-10-289-762-996	Sequence 966, App	934	29	60.9	23	4	US-10-346-162-250	Sequence 251, App
862	29	63.0	778	4	US-10-437-963-185104	Sequence 185104, A	935	29	60.9	23	4	US-10-346-162-251	Sequence 34725, A
863	29	63.0	784	4	US-10-424-599-262098	Sequence 262098, A	936	29	60.9	33	3	US-09-864-761-34725	Sequence 319241, A
864	29	63.0	781	4	US-10-437-963-163710	Sequence 163710, A	937	29	60.9	44	4	US-10-425-115-319241	Sequence 45552, A
865	29	63.0	784	6	US-11-097-143-40128	Sequence 40128, A	938	29	60.9	45	3	US-09-864-761-45552	Sequence 260609, A
866	29	63.0	800	4	US-10-369-493-21510	Sequence 21510, A	939	29	60.9	46	4	US-10-425-115-260609	Sequence 409, App
867	29	63.0	806	4	US-10-282-122A-78381	Sequence 78381, A	940	29	60.9	51	4	US-10-690-276-409	Sequence 115739, A
868	29	63.0	806	4	US-10-206-618-9	Sequence 9, Appl	941	29	60.9	51	4	US-10-437-963-115739	Sequence 257866, A
869	29	63.0	816	4	US-10-424-599-225948	Sequence 225948, A	942	29	60.9	54	4	US-10-425-115-225948	Sequence 246, App
870	29	63.0	816	5	US-10-450-763-33068	Sequence 33068, A	943	29	60.9	57	4	US-10-346-162-246	Sequence 165, App
871	29	63.0	831	5	US-10-732-923-6843	Sequence 6843, Ap	944	29	60.9	60	5	US-10-316-194-165	Sequence 201, App
872	29	63.0	836	4	US-10-282-122A-5336	Sequence 5336, A	945	29	60.9	60	5	US-10-424-599-284468	Sequence 277618, A
873	29	63.0	865	4	US-10-437-963-110386	Sequence 110386, A	946	29	60.9	62	4	US-10-425-115-277618	Sequence 290949, A
874	29	63.0	868	5	US-10-450-763-60619	Sequence 60619, A	947	29	60.9	63	4	US-10-425-115-290949	Sequence 241161, A
875	29	63.0	903	4	US-10-170-385-439	Sequence 439, App	948	29	60.9	67	4	US-10-424-599-241161	Sequence 302894, A
876	29	63.0	911	3	US-09-745-763-140	Sequence 140, App	949	29	60.9	68	4	US-10-425-115-362457	Sequence 362457, A
877	29	63.0	935	4	US-10-408-765A-33	Sequence 33, Appl	950	29	60.9	68	4	US-10-425-115-300139	Sequence 300139, A
878	29	63.0	935	4	US-10-741-601-561	Sequence 561, App	951	29	60.9	69	4	US-09-764-860-335	Sequence 335, App
879	29	63.0	935	4	US-10-741-601-562	Sequence 562, App	952	29	60.9	71	3	US-10-074-095-335	Sequence 335, App
880	29	63.0	935	5	US-10-741-600-1645	Sequence 1645, Ap	953	29	60.9	71	3	US-10-424-599-284156	Sequence 284156, A
881	29	63.0	935	5	US-10-741-600-1646	Sequence 1646, Ap	954	29	60.9	72	4	US-10-424-599-284156	Sequence 78067, A
882	29	63.0	946	6	US-11-097-143-42840	Sequence 42840, A	955	29	60.9	72	4	US-10-424-599-284156	Sequence 190053, A
883	29	63.0	970	4	US-10-331-061-5	Sequence 5, Appl	956	29	60.9	74	4	US-10-212-872-335	Sequence 21113, A
884	29	63.0	974	5	US-10-732-923-12820	Sequence 12820, A	957	29	60.9	75	4	US-10-382-122A-78067	Sequence 45068, A
885	29	63.0	994	4	US-10-425-115-282418	Sequence 282418, A	958	29	60.9	75	4	US-10-382-122A-45068	Sequence 26, Appl
886	29	63.0	1073	4	US-10-156-761-12156	Sequence 12156, A	959	29	60.9	77	3	US-09-918-036-3	Sequence 24, Appl
887	29	63.0	1076	5	US-10-723-860-1420	Sequence 1420, A	960	29	60.9	79	4	US-10-424-599-211178	Sequence 211178, A
888	29	63.0	1076	5	US-10-756-149-5065	Sequence 5065, Ap	961	29	60.9	80	4	US-10-424-599-21113	Sequence 26, Appl
889	29	63.0	1123	4	US-10-282-122A-70581	Sequence 70581, A	962	29	60.9	83	4	US-10-316-194-26	Sequence 61581, A
890	29	63.0	1134	5	US-10-732-923-12831	Sequence 12831, A	963	29	60.9	84	4	US-10-316-194-26	Sequence 263985, A
891	29	63.0	1140	5	US-10-732-923-12817	Sequence 12817, A	964	29	60.9	84	4	US-10-425-115-263985	Sequence 304918, A
892	29	63.0	1145	6	US-11-097-143-14385	Sequence 14385, A	965	29	60.9	84	4	US-10-425-115-304918	Sequence 2, Appl
893	29	63.0	1151	5	US-10-934-998-61	Sequence 61, Appl	966	29	60.9	85	4	US-10-055-797-2	Sequence 2, Appl
894	29	63.0	1198	4	US-10-210-172-36	Sequence 26, Appl	967	29	60.9	85	4	US-10-350-799-2	Sequence 5660, Ap
895	29	63.0	1203	6	US-11-097-143-10917	Sequence 10917, A	968	29	60.9	85	4	US-10-369-493-5660	Sequence 2076, Ap
896	29	63.0	1257	4	US-10-116-275-202	Sequence 202, App	969	29	60.9	85	4	US-10-732-923-20568	Sequence 50, Appl
897	29	63.0	1257	4	US-10-411-010-22	Sequence 22, Appl	970	29	60.9	85	4	US-10-316-194-158	Sequence 150, App
898	29	63.0	1257	4	US-10-411-010-23	Sequence 23, Appl	971	29	60.9	89	4	US-10-316-194-159	Sequence 150, App
899	29	63.0	1257	5	US-10-723-860-1926	Sequence 1926, Ap	972	29	60.9	89	4	US-10-316-194-160	Sequence 150, App
900	29	63.0	1257	5	US-10-482-029-118	Sequence 118, App	973	29	60.9	89	4	US-10-316-194-160	Sequence 150, App
901	29	63.0	1257	5	US-10-953-264-22	Sequence 22, Appl	974	29	60.9	89	5	US-10-732-180-194	Sequence 194, App
902	29	63.0	1257	5	US-10-953-264-23	Sequence 23, Appl	975	29	60.9	89	5	US-10-732-180-194	Sequence 194, App
903	29	63.0	1616	3	US-09-820-843A-16	Sequence 16, Appl	976	29	60.9	89	5	US-10-732-180-195	Sequence 195, App

977 28 60.9 89 5 US-10-732-180-196 Sequence 196, App
978 28 60.9 91 4 US-10-423-115-257319 Sequence 257319,
979 28 60.9 92 5 US-10-732-180-209 Sequence 209, App
980 28 60.9 94 4 US-10-424-599-173252 Sequence 173252,
981 28 60.9 95 4 US-10-424-599-247325 Sequence 247325,
982 28 60.9 96 4 US-10-316-194-16 Sequence 16, Appl
983 28 60.9 96 4 US-10-425-115-292667 Sequence 292667,
984 28 60.9 96 5 US-10-732-180-16 Sequence 16, Appl
985 28 60.9 97 4 US-10-016-516-2 Sequence 16, Appl
986 28 60.9 97 4 US-10-424-599-145627 Sequence 145627,
987 28 60.9 97 4 US-10-425-115-228578 Sequence 228578,
988 28 60.9 98 4 US-10-425-115-297957 Sequence 297957,
989 28 60.9 101 4 US-10-106-698-5572 Sequence 5572, Ap
990 28 60.9 102 4 US-10-674-755-18 Sequence 18, Appl
991 28 60.9 102 4 US-10-425-115-235049 Sequence 235049,
992 28 60.9 104 4 US-10-156-761-10345 Sequence 10345, A
993 28 60.9 105 4 US-10-424-599-209225 Sequence 209225,
994 28 60.9 105 5 US-10-450-763-31312 Sequence 31312, A
995 28 60.9 106 3 US-09-864-761-45807 Sequence 45807, A
996 28 60.9 107 4 US-10-424-599-240363 Sequence 240363,
997 28 60.9 107 4 US-10-425-115-206428 Sequence 206428,
998 28 60.9 108 4 US-10-767-701-38377 Sequence 38377, A
999 28 60.9 108 5 US-10-732-180-208 Sequence 208, Appl
1000 28 60.9 111 4 US-10-316-194-15 Sequence 15, Appl

ALIGNMENTS

RESULT 1
US-10-128-711-71
Sequence 71, Application US/10128711
Publication No. US2003009634A1
GENERAL INFORMATION:
APPLICANT: VITIELLO, Maria A.
CHESTNUT, Robert W.
CELIUS, Etebean
GRAY, Howard
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
CTL IMMUNITY
NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Knourie and Crew
STREET: Stewart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/128, 711
FILING DATE: 22-Apr-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4

TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 71:
US-10-128-711-71

Query Match 100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLOPETT 9
Db 1 MLDLOPETT 9

RESULT 2
US-10-777-053-328
Sequence 328, Application US/10777053
Publication No. US20040132088A1
GENERAL INFORMATION:
APPLICANT: Simard, John J. L.
APPLICANT: Diamond, David C.
APPLICANT: Qiu, Zhiyong
APPLICANT: Lei, Xiang-Dong
TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
FILE REFERENCE: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
CURRENT APPLICATION NUMBER: US/10/777,053
CURRENT FILING DATE: 2004-02-10
PRIOR FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: 60/336,968
NUMBER OF SEQ ID NOS: 979
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 328
LENGTH: 9
TYPE: PPT
ORGANISM: Human Papillomavirus 16
US-10-777-053-328

Query Match 100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLOPETT 9
Db 1 MLDLOPETT 9

RESULT 3
US-10-777-053-496
Sequence 496, Application US/10777053
Publication No. US20040132088A1
GENERAL INFORMATION:
APPLICANT: Simard, John J. L.
APPLICANT: Diamond, David C.
APPLICANT: Qiu, Zhiyong
APPLICANT: Lei, Xiang-Dong
TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
FILE REFERENCE: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
CURRENT APPLICATION NUMBER: US/10/777,053
CURRENT FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 10/292,413
PRIOR FILING DATE: 2002-11-07

```
/ PRIOR APPLICATION NUMBER: 60/336,968
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 979
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 496
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Human Papillomavirus
US-10-777-053-496
```

```
Query Match          100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 MLDLPETT 9
        |||||
Db       1 MLDLPETT 9
```

```
RESULT 4
US-10-777-053-913
/ Sequence 913, Application US/10777053
/ Publication No. US20040132088A1
/ GENERAL INFORMATION:
/ APPLICANT: Simard, John J. L.
/ APPLICANT: Diamond, David C.
/ APPLICANT: Qiu, Zhiyong
/ APPLICANT: Lei, Xiang-Dong
/ TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
/ FILE REFERENCE: MANNK.022C1
/ CURRENT APPLICATION NUMBER: US/10/777,053
/ PRIOR FILING DATE: 2004-02-10
/ PRIOR APPLICATION NUMBER: 10/292,413
/ PRIOR FILING DATE: 2002-11-07
/ PRIOR APPLICATION NUMBER: 60/336,968
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 979
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 913
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Homo Sapien
US-10-777-053-913
```

```
Query Match          100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 MLDLPETT 9
        |||||
Db       1 MLDLPETT 9
```

```
RESULT 5
US-10-837-217-328
/ Sequence 328, Application US/10837217
/ Publication No. US20040203051A1
/ GENERAL INFORMATION:
/ APPLICANT: Simard, John J. L.
/ APPLICANT: Diamond, David C.
/ APPLICANT: Qiu, Zhiyong
/ APPLICANT: Lei, Xiang-Dong
/ TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
/ FILE REFERENCE: MANNK.022C2
/ CURRENT APPLICATION NUMBER: US/10/837,217
/ PRIOR FILING DATE: 2004-04-30
/ PRIOR APPLICATION NUMBER: 10/292,413
/ PRIOR FILING DATE: 2002-11-07
/ PRIOR APPLICATION NUMBER: 60/336,968
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 979
```

```
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 328
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Human Papillomavirus 16
US-10-837-217-328
```

```
Query Match          100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 MLDLPETT 9
        |||||
Db       1 MLDLPETT 9
```

```
RESULT 6
US-10-837-217-496
/ Sequence 496, Application US/10837217
/ Publication No. US20040203051A1
/ GENERAL INFORMATION:
/ APPLICANT: Simard, John J. L.
/ APPLICANT: Diamond, David C.
/ APPLICANT: Qiu, Zhiyong
/ APPLICANT: Lei, Xiang-Dong
/ TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
/ FILE REFERENCE: MANNK.022C2
/ CURRENT APPLICATION NUMBER: US/10/837,217
/ PRIOR FILING DATE: 2004-04-30
/ PRIOR APPLICATION NUMBER: 10/292,413
/ PRIOR FILING DATE: 2002-11-07
/ PRIOR APPLICATION NUMBER: 60/336,968
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 979
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 496
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Human Papillomavirus
US-10-837-217-496
```

```
Query Match          100.0%; Score 46; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 MLDLPETT 9
        |||||
Db       1 MLDLPETT 9
```

```
RESULT 7
US-10-837-217-913
/ Sequence 913, Application US/10837217
/ Publication No. US20040203051A1
/ GENERAL INFORMATION:
/ APPLICANT: Simard, John J. L.
/ APPLICANT: Diamond, David C.
/ APPLICANT: Qiu, Zhiyong
/ APPLICANT: Lei, Xiang-Dong
/ TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
/ FILE REFERENCE: MANNK.022C2
/ CURRENT APPLICATION NUMBER: US/10/837,217
/ PRIOR FILING DATE: 2004-04-30
/ PRIOR APPLICATION NUMBER: 10/292,413
/ PRIOR FILING DATE: 2002-11-07
/ PRIOR APPLICATION NUMBER: 60/336,968
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 979
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 913
/ LENGTH: 9
```


TYPE: PRT
ORGANISM: Homo Sapien
US-10-837-217-913

Query Match
Best Local Similarity 100.0%; Score 46; DB 4; Length 9;
Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQETT 9
Db 1 MLDLQETT 9

RESULT 8
US-10-484-063-12
Sequence 12, Application US/10484063
Publication No. US20050048467A1
GENERAL INFORMATION:

APPLICANT: SASTRY, K. JAGANNADHA
APPLICANT: TORTOLERO-LUNA, GUILERMO

APPLICANT: FOLLEN, MICHEL

TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN

FILE REFERENCE: UTSC:560US

CURRENT APPLICATION NUMBER: US/10/484,063

PRIOR FILING DATE: 2004-01-16

PRIOR APPLICATION NUMBER: PCT/US02/23198

PRIOR FILING DATE: 2002-07-19

PRIOR APPLICATION NUMBER: 60/306,809

PRIOR FILING DATE: 2001-07-20

NUMBER OF SEQ ID NOS: 27

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 12

LENGTH: 9

TYPE: PRT

ORGANISM: Human papillomavirus

US-10-484-063-12

Query Match
Best Local Similarity 100.0%; Score 46; DB 5; Length 9;
Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQETT 9
Db 1 MLDLQETT 9

RESULT 9
US-10-751-845-101
Sequence 101, Application US/10751845

Publication No. US20050100928A1

GENERAL INFORMATION:

APPLICANT: Hedley, Mary Lynne

APPLICANT: Urban, Robert G.

APPLICANT: Chicot, Roman M.

TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES

FILE REFERENCE: 08191-013001

CURRENT APPLICATION NUMBER: US/10/751,845

PRIOR FILING DATE: 2004-01-05

PRIOR APPLICATION NUMBER: US/09/664,225

PRIOR FILING DATE: 2000-08-18

PRIOR APPLICATION NUMBER: US 60/169,846

PRIOR FILING DATE: 1999-12-09

PRIOR APPLICATION NUMBER: US 60/154,665

PRIOR FILING DATE: 1999-09-16

NUMBER OF SEQ ID NOS: 163

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 101

LENGTH: 9

TYPE: PRT

ORGANISM: Human Papilloma virus

US-10-751-845-101

Query Match
Best Local Similarity 100.0%; Score 46; DB 5; Length 9;
Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQETT 9
Db 1 MLDLQETT 9

RESULT 10
US-10-924-377-7
Sequence 7, Application US/10924377

Publication No. US20050181458A1

GENERAL INFORMATION:

APPLICANT: Harding, Fiona

APPLICANT: Mucha, Jeannette Marie

TITLE OF INVENTION: HPV CD8+ T-Cell Epitopes

FILE REFERENCE: GCA11-2US

CURRENT APPLICATION NUMBER: US/10/924,377

PRIOR FILING DATE: 2004-08-23

PRIOR APPLICATION NUMBER: US 60/500,452

PRIOR FILING DATE: 2003-09-05

NUMBER OF SEQ ID NOS: 25

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 7

LENGTH: 9

TYPE: PRT

ORGANISM: human papillomavirus

US-10-924-377-7

Query Match
Best Local Similarity 100.0%; Score 46; DB 5; Length 9;
Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQETT 9
Db 1 MLDLQETT 9

RESULT 11
US-09-847-185-19

Sequence 19, Application US/09847185

Patent No. US20020076392A1

GENERAL INFORMATION:

APPLICANT: Soo Hoo, William

TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS

COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE

RESPONSE USING SAME

NUMBER OF SEQUENCES: 50

CORRESPONDENCE ADDRESS:

ADDRESSEE: CAMPBELL & FLORES, LLP

STREET: 4370 La Jolla Village Drive, Suite 700

CITY: San Diego

STATE: California

COUNTRY: United States

ZIP: 92121

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/847,185

FILING DATE: 01-May-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/201,931

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Campbell, Cathryn A.

REGISTRATION NUMBER: 31,815

REFERENCE/DOCKET NUMBER: P-IM 2442

TELECOMMUNICATION INFORMATION:

TELEPHONE: (619)535-9001
TELEFAX: (619)535-8949
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-09-847-185-19

Query Match 100.0%; Score 46; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||||
DB 2 MLDLOPETT 10

RESULT 12
US-09-835-853-22
Sequence 22, Application US/09835853
Patent No. US20020165136A1
GENERAL INFORMATION:
APPLICANT: BASERGA, Renato L.
APPLICANT: RESNICOFF, Mariana
APPLICANT: HUANG, Ziwel
TITLE OF INVENTION: MHC PEPTIDES AND METHODS OF USE
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: HALE and DORR LLP
STREET: 1455 Pennsylvania Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/835,853
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/704,344
FILING DATE: 28-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: MIXON, Henry N.
REGISTRATION NUMBER: 32,073
REFERENCE/DOCKET NUMBER: 104322.196
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 942-8459
TELEFAX: (202) 942-8484
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHEICAL: NO
ANTI-SENSE: NO
US-09-835-853-22

Query Match 100.0%; Score 46; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MLDLOPETT 9
|||||

DB 2 MLDLOPETT 10

RESULT 13
US-09-739-466C-13
Sequence 13, Application US/09739466C
Publication No. US20050107585A1
GENERAL INFORMATION:
APPLICANT: MURRAY, JOSEPH S
APPLICANT: SIADHAN, TERUNA J
APPLICANT: HU, YONGBO
TITLE OF INVENTION: SIGNAL-1/SIGNAL-2 BIFUNCTIONAL PEPTIDE INHIBITORS
FILE REFERENCE: 23902-08805
CURRENT APPLICATION NUMBER: US/09/739,466C
CURRENT FILING DATE: 2000-12-18
NUMBER OF SEQ ID NOS: 46
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO: 13
LENGTH: 10
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-739-466C-13

Query Match 100.0%; Score 46; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||||
DB 2 MLDLOPETT 10

RESULT 14
US-10-133-210-271
Sequence 271, Application US/10133210
Publication No. US20030103964A1
GENERAL INFORMATION:
APPLICANT: Delisi, Charles
APPLICANT: Berzofsky, Jay
APPLICANT: Gulukota, Kamalakara
APPLICANT: Vaccaro, Dennis
APPLICANT: Weng, Zhiping
APPLICANT: Zhang, Chao
TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND
FILE REFERENCE: BU-035AX
CURRENT APPLICATION NUMBER: US/10/133,210
CURRENT FILING DATE: 2002-04-26
NUMBER OF SEQ ID NOS: 281
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 271
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-133-210-271

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||||
DB 2 MLDLOPETT 10

RESULT 15
US-10-224-286-19
Sequence 19, Application US/10224286
Publication No. US20030108517A1
GENERAL INFORMATION:
APPLICANT: Soo Hoo, William

TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
RESPONSE USING SAME

NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS:
ADDRESSEE: CAMPBELL & FLORES, LLP
CITY: 4370 La Jolla Village Drive, Suite 700
STATE: San Diego
COUNTRY: California
ZIP: 92121

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/224,266
FILING DATE: 19-Aug-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/902,516
FILING DATE: 29-JUL-1997

ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-1M 2442
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)535-9001
TELEFAX: (619)535-8949

INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 19:
US-10-224-286-19

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPETT 9
DB 2 MLDLQPETT 10

RESULT 16
US-10-177-390-33
Sequence 33, Application US/10177390
Publication No. US20030143743A1
GENERAL INFORMATION:
APPLICANT: Schuler, Gerold
APPLICANT: N.V. Antwerp Innovatiecentrum
TITLE OF INVENTION: Improved transfection of Eucaryotic Cells with Linear
FILE REFERENCE: Polynucleotides by Electroporation
CURRENT APPLICATION NUMBER: US/10/117,390
CURRENT FILING DATE: 2002-06-20
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 33
LENGTH: 10
TYPE: PRT
ORGANISM: Influenza virus
US-10-177-390-33

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPETT 9

DB 2 MLDLQPETT 10

RESULT 17
US-10-406-317-30
Sequence 30, Application US/10406317
Publication No. US20040019195A1
GENERAL INFORMATION:
APPLICANT: Schlom, Jeffrey;
APPLICANT: Hodges, James;
APPLICANT: Panicali, Dennis
TITLE OF INVENTION: A recombinant vector expressing multiple constitutively
TITLE OF INVENTION: molecules and uses thereof
FILE REFERENCE: 38163-0189
CURRENT APPLICATION NUMBER: US/10/406,317
CURRENT FILING DATE: 2003-04-04
PRIOR APPLICATION NUMBER: US/09/856,988
PRIOR FILING DATE: 2001-05-30
PRIOR APPLICATION NUMBER: PCT/US99/26866
PRIOR FILING DATE: 1999-11-12
PRIOR APPLICATION NUMBER: 60/111,582
PRIOR FILING DATE: 1998-12-09
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 30
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC
OTHER INFORMATION: PEPTIDE
US-10-406-317-30

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPETT 9
DB 2 MLDLQPETT 10

RESULT 18
US-10-297-168-30
Sequence 30, Application US/10297168
Publication No. US20040091995A1
GENERAL INFORMATION:
APPLICANT: SCHLOM, Jeffrey
APPLICANT: GREINER, John W.
APPLICANT: KASS, Erik
APPLICANT: PANICALI, Dennis
TITLE OF INVENTION: RECOMBINANT NON-REPLICATING VIRUS EXPRESSING GM-CSF AND
FILE REFERENCE: 38163-0167
CURRENT APPLICATION NUMBER: US/10/297,168
CURRENT FILING DATE: 2002-12-03
PRIOR APPLICATION NUMBER: PCT/US01/19201
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US60/211,717
PRIOR FILING DATE: 2000-06-15
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 30
LENGTH: 10
TYPE: PRT
ORGANISM: Homo sapiens
US-10-297-168-30

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPEPT 9
|||||
Db 2 MLDLQPEPT 10

RESULT 19
US-10-777-053-329
; Sequence 329, Application US/10777053
; Publication No. US20040132088A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; CURRENT FILING DATE: 2004-02-10
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 329
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus 16
US-10-777-053-329

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPEPT 9
|||||
Db 2 MLDLQPEPT 10

RESULT 20
US-10-777-053-542
; Sequence 542, Application US/10777053
; Publication No. US20040132088A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; CURRENT FILING DATE: 2004-02-10
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 542
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-777-053-542

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPEPT 9
|||||
Db 2 MLDLQPEPT 10

RESULT 21
US-10-837-217-329

; Sequence 329, Application US/10837217
; Publication No. US20040203051A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK.022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; CURRENT FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 329
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus 16
US-10-837-217-329

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPEPT 9
|||||
Db 2 MLDLQPEPT 10

RESULT 22
US-10-837-217-542
; Sequence 542, Application US/10837217
; Publication No. US20040203051A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK.022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; CURRENT FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 542
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-837-217-542

Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLQPEPT 9
|||||
Db 2 MLDLQPEPT 10

RESULT 23

```
US-10-890-526-19
; Sequence 19, Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Jochmus, Ingrid
; APPLICANT: Nieland, John
; TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; CURRENT FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-19

Query Match      100.0%; Score 46; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLPETT 9
       |||||
Db      2 MLDLPETT 10

RESULT 24
US-10-751-845-105
; Sequence 105, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 105
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-105

Query Match      100.0%; Score 46; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLPETT 9
       |||||
Db      2 MLDLPETT 10

RESULT 25
US-10-776-521B-366
; Sequence 366, Application US/10776521B
```

```
; Publication No. US20050202033A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, Jessica
; APPLICANT: Prince-Cohane, Kenya
; APPLICANT: Mehta, Sunil
; APPLICANT: Slusarewicz, Paul
; APPLICANT: Andjelic, Sofija
; APPLICANT: Barber, Brian
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED VACCINES AND
; TITLE OF INVENTION: IMMUNOTHERAPIES
; FILE REFERENCE: 8449-405-999
; CURRENT APPLICATION NUMBER: US/10/776,521B
; CURRENT FILING DATE: 2004-02-12
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
; PRIOR APPLICATION NUMBER: 60/462,469
; PRIOR FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: 60/447,142
; PRIOR FILING DATE: 2003-02-13
; NUMBER OF SEQ ID NOS: 419
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 366
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Heat shock protein binding domain
US-10-776-521B-366

Query Match      100.0%; Score 46; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLPETT 9
       |||||
Db      2 MLDLPETT 10

RESULT 26
US-10-820-067A-877
; Sequence 877, Application US/10820067A
; Publication No. US20050214312A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, J.
; APPLICANT: Prince-Cohane, K.
; APPLICANT: Mehta, S.
; APPLICANT: Slusarewicz, P.
; APPLICANT: Andjelic, S.
; APPLICANT: Barber, B.
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED
; TITLE OF INVENTION: VACCINES AND IMMUNOTHERAPIES
; FILE REFERENCE: 8449-406-999
; CURRENT APPLICATION NUMBER: US/10/820,067A
; CURRENT FILING DATE: 2004-04-08
; PRIOR APPLICATION NUMBER: 60/462,469
; PRIOR FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; NUMBER OF SEQ ID NOS: 926
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 877
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Heat shock-protein binding motif to form hybrid antigen
US-10-820-067A-877

Query Match      100.0%; Score 46; DB 5; Length 10;
```

Best Local Similarity 100.0%; Pred. No. 0.066;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 |||||
DB 2 MLDLOPETT 10

RESULT 27

US-10-062-710-206
; Sequence 206, Application US/10062710
; Publication No. US20030049253A1
; GENERAL INFORMATION:
; APPLICANT: Li, Frank Q.
; APPLICANT: Chu, Yong-Liang
; APPLICANT: Qiu, Jian-Tai
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of
; TITLE OF INVENTION: MHC-Recognized Epitopes
; TITLE OF INVENTION: Via Peptide Vaccines
; FILE REFERENCE: 3781-001-27
; CURRENT APPLICATION NUMBER: US/10/062,710
; PRIOR FILING DATE: 2002-02-05
; PRIOR APPLICATION NUMBER: US 60/310,498
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 232
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 206
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: T Cell epitopes
US-10-062-710-206

Query Match 100.0%; Score 46; DB 4; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 |||||
DB 3 MLDLOPETT 11

RESULT 28

US-10-648-547-72
; Sequence 72, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 72
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-72

Query Match 100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 |||||
DB 2 MLDLOPETT 10

RESULT 29

US-10-648-547-80
; Sequence 80, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 80
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-80

Query Match 100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 |||||
DB 3 MLDLOPETT 11

RESULT 30

US-10-648-547-92
; Sequence 92, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 92
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-92

Query Match 100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 |||||
DB 6 MLDLOPETT 14

RESULT 31

US-10-476-570-45
; Sequence 45, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE

```

; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 45
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 6-20
US-10-476-570-45

Query Match          100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 7 MLDLOPETT 15
```

```

RESULT 32
US-10-476-570-46
; Sequence 46, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 46
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 9-23
US-10-476-570-46

Query Match          100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MLDLOPETT 9
Db 4 MLDLOPETT 12

RESULT 33
US-10-306-541-72
```

```

; Sequence 72, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 72
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-72
```

```

Query Match          100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 2 MLDLOPETT 10
```

```

RESULT 34
US-10-306-541-80
; Sequence 80, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 80
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-80
```

```

Query Match          100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 3 MLDLOPETT 11
```

```

RESULT 35
US-10-306-541-92
; Sequence 92, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
```

```
; SEQ ID NO 92
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-92
```

```
Query Match          100.0%; Score 46; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MDLQPEPT 9
    |||||
DB 6 MDLQPEPT 14
```

```
RESULT 36
US-10-751-845-67
; Sequence 67, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chic, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 67
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-67
```

```
Query Match          100.0%; Score 46; DB 5; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MDLQPEPT 9
    |||||
DB 6 MDLQPEPT 14
```

```
RESULT 37
US-10-432-465-44
; Sequence 44, Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John
; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 44
; LENGTH: 20
```

```
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-44
```

```
Query Match          100.0%; Score 46; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MDLQPEPT 9
    |||||
DB 12 MDLQPEPT 20
```

```
RESULT 38
US-10-432-465-45
; Sequence 45, Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John
; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-45
```

```
Query Match          100.0%; Score 46; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MDLQPEPT 9
    |||||
DB 1 MDLQPEPT 9
```

```
RESULT 39
US-10-476-570-14
; Sequence 14, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIER, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVEILLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; TITLE OF INVENTION: papillomavirus proteins and uses thereof
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 20
```

```

; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 1-20
US-10-476-570-14

Query Match          100.0%; Score 46; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLOPETT 9
        |||||
Db       12 MLDLOPETT 20

RESULT 40
US-10-890-526-69
; Sequence 69, Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Jochims, Ingrid
; APPLICANT: Jochims, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; TITLE OF INVENTION: Therapy
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; CURRENT FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-69

Query Match          100.0%; Score 46; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLOPETT 9
        |||||
Db       12 MLDLOPETT 20

RESULT 41
US-10-890-526-70
; Sequence 70, Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Jochims, Ingrid
; APPLICANT: Jochims, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; TITLE OF INVENTION: Therapy
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; CURRENT FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 70
```

```

; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-70

Query Match          100.0%; Score 46; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLOPETT 9
        |||||
Db       1 MLDLOPETT 9

RESULT 42
US-10-476-570-15
; Sequence 15, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUYELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; TITLE OF INVENTION: Papillomavirus proteins and uses thereof
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 21
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 7-27
US-10-476-570-15

Query Match          100.0%; Score 46; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MLDLOPETT 9
        |||||
Db       6 MLDLOPETT 14

RESULT 43
US-10-776-521B-378
; Sequence 378, Application US/10776521B
; Publication No. US20050202033A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, Jessica
; APPLICANT: Prince-Cohane, Kenya
; APPLICANT: Mehta, Sunil
; APPLICANT: Slusarewicz, Paul
; APPLICANT: Andjelic, Sofija
; APPLICANT: Barber, Brian
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED VACCINES AND
; TITLE OF INVENTION: IMMUNOTHERAPIES
; FILE REFERENCE: 8449-405-999
; CURRENT APPLICATION NUMBER: US/10/776,521B
; CURRENT FILING DATE: 2004-02-12
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
```


;; PRIOR APPLICATION NUMBER: 60/462,469
;; PRIOR FILING DATE: 2003-04-11
;; PRIOR APPLICATION NUMBER: 60/447,142
;; PRIOR FILING DATE: 2003-02-13
;; NUMBER OF SEQ ID NOS: 419
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 378
;; LENGTH: 21
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Hybrid antigen
US-10-776-521B-378

Query Match 100.0%; Score 46; DB 5; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 2 MLDLOPETT 10

RESULT 44
US-10-476-570-57
;; Sequence 57, Application US/10476570
;; Publication No. US20040170644A1
;; GENERAL INFORMATION:
;; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
;; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
;; APPLICANT: MAILLIERE, Bernard
;; APPLICANT: BOURGAULT-VILLADA, Isabelle
;; APPLICANT: BOUVELLE-MORATILLE, Sandra
;; APPLICANT: GUILLET, Jean-Gerard
;; TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
;; FILE REFERENCE: 45636-5071-US
;; CURRENT APPLICATION NUMBER: US/10/476,570
;; PRIOR FILING DATE: 2003-11-04
;; PRIOR APPLICATION NUMBER: PCT/FR02/01533
;; PRIOR FILING DATE: 2002-05-03
;; PRIOR APPLICATION NUMBER: FR 01 05980
;; PRIOR FILING DATE: 2001-05-04
;; NUMBER OF SEQ ID NOS: 63
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 57
;; LENGTH: 23
;; TYPE: PRT
;; ORGANISM: artificial sequence
;; FEATURE:
;; OTHER INFORMATION: Description of the artificial sequence: peptide E7 3-25
US-10-476-570-57

Query Match 100.0%; Score 46; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 10 MLDLOPETT 18

RESULT 45
US-10-858-384-14
;; Sequence 14, Application US/10858384
;; Publication No. US20050033025A1
;; GENERAL INFORMATION:
;; APPLICANT: CHOPPIN, JEANNINE
;; APPLICANT: BOURGAULT VILLADA, ISABELLE
;; APPLICANT: GUILLET, JEAN-GERARD
;; APPLICANT: CONNAN, FRANCINE
;; APPLICANT: FERRIERE, ESTELLE
;; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE B6 PROTEIN

;; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
;; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
;; FILE REFERENCE: 0508-1037-1
;; CURRENT APPLICATION NUMBER: US/10/858,384
;; CURRENT FILING DATE: 2004-06-02
;; PRIOR APPLICATION NUMBER: FR 9907012
;; PRIOR FILING DATE: 1999-06-03
;; NUMBER OF SEQ ID NOS: 24
;; SOFTWARE: PatentIn Ver. 3.2
;; SEQ ID NO 14
;; LENGTH: 23
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of the Artificial Sequence: Peptide fragment
US-10-858-384-14

Query Match 100.0%; Score 46; DB 5; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 10 MLDLOPETT 18

RESULT 46
US-09-828-645-3
;; Sequence 3, Application US/09828645
;; Publication No. US20030027750A1
;; GENERAL INFORMATION:
;; APPLICANT: Hu, Yao Xiong
;; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
;; FILE REFERENCE: 146-1-002
;; CURRENT APPLICATION NUMBER: US/09/828,645
;; PRIOR FILING DATE: 2001-04-05
;; PRIOR APPLICATION NUMBER: US 60/194,796
;; PRIOR FILING DATE: 2000-04-05
;; NUMBER OF SEQ ID NOS: 8
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 3
;; LENGTH: 30
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-3

Query Match 100.0%; Score 46; DB 3; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 7 MLDLOPETT 15

RESULT 47
US-09-828-645-7
;; Sequence 7, Application US/09828645
;; Publication No. US20030027750A1
;; GENERAL INFORMATION:
;; APPLICANT: Hu, Yao Xiong
;; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
;; FILE REFERENCE: 146-1-002
;; CURRENT APPLICATION NUMBER: US/09/828,645
;; PRIOR FILING DATE: 2001-04-05
;; PRIOR APPLICATION NUMBER: US 60/194,796
;; PRIOR FILING DATE: 2000-04-05
;; NUMBER OF SEQ ID NOS: 8
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 7

```
/ LENGTH: 30
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Derived from the E7 early region of HPV-16
/ NAME/KEY: misc feature
/ LOCATION: (19)..(19)
/ OTHER INFORMATION: Xaa = L-carboxymethylcysteine
US-09-828-645-7
```

```
Query Match          100.0%; Score 46; DB 3; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 MLDLQPETT 9
        |||||
Db      7 MLDLQPETT 15
```

```
RESULT 48
US-10-827-007-3
; Sequence 3, Application US/10827007
; Publication No. US20050042599A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 3352-2-1-3
; CURRENT APPLICATION NUMBER: US/10/827,007
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
US-10-827-007-3
```

```
Query Match          100.0%; Score 46; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 MLDLQPETT 9
        |||||
Db      7 MLDLQPETT 15
```

```
RESULT 49
US-10-827-007-7
; Sequence 7, Application US/10827007
; Publication No. US20050042599A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 3352-2-1-3
; CURRENT APPLICATION NUMBER: US/10/827,007
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
```

```
/ LENGTH: 30
/ TYPE: PRT
/ ORGANISM: Artificial
/ FEATURE:
/ OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
/ NAME/KEY: MISC FEATURE
/ LOCATION: (19)..(19)
/ OTHER INFORMATION: Xaa = L-Carboxymethylcysteine
US-10-827-007-7
```

```
Query Match          100.0%; Score 46; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 MLDLQPETT 9
        |||||
Db      7 MLDLQPETT 15
```

```
RESULT 50
US-10-827-083-3
; Sequence 3, Application US/10827083
; Publication No. US20050042600A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 3352-2-1-4
; CURRENT APPLICATION NUMBER: US/10/827,083
; CURRENT FILING DATE: 2004-04-19
; PRIOR APPLICATION NUMBER: US 09/828,645
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
US-10-827-083-3
```

```
Query Match          100.0%; Score 46; DB 5; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 MLDLQPETT 9
        |||||
Db      7 MLDLQPETT 15
```

```
Search completed: May 5, 2006, 08:39:21
Job time : 60 secs
```

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:29:56 ; Search time 8.4 Seconds
(without alignments)
49.591 Million cell updates/sec

Title: US-08-170-344-15
Perfect score: 46
Sequence: 1 MLDLPERT 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues
Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published Applications_AA_New.*
1: /SIDS5/ptodata/1/pubpaa/US08_NEW_PUB.pep1.*
2: /SIDS5/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
3: /SIDS5/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
4: /SIDS5/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
5: /SIDS5/ptodata/1/pubpaa/PCR_NEW_PUB.pep.*
6: /SIDS5/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
7: /SIDS5/ptodata/1/pubpaa/US10_NEW_PUB.pep1.*
8: /SIDS5/ptodata/1/pubpaa/US10_NEW_PUB.pep1.*
9: /SIDS5/ptodata/1/pubpaa/US11_NEW_PUB.pep1.*
10: /SIDS5/ptodata/1/pubpaa/US11_NEW_PUB.pep1.*
11: /SIDS5/ptodata/1/pubpaa/US60_NEW_PUB.pep1.*
12: /SIDS5/ptodata/1/pubpaa/US60_NEW_PUB.pep1.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	100.0	15	9	US-10-530-061-1711	Sequence 1711, Ap
2	100.0	15	9	US-10-530-061-1749	Sequence 1749, Ap
3	100.0	98	8	US-10-511-814-8	Sequence 8, Appl
4	100.0	98	8	US-10-511-814-11	Sequence 11, Appl
5	100.0	98	8	US-10-530-253-14	Sequence 14, Appl
6	100.0	98	11	US-11-179-478-4	Sequence 4, Appl
7	100.0	248	9	US-10-530-253-1	Sequence 1, Appl
8	100.0	248	9	US-10-530-253-3	Sequence 3, Appl
9	100.0	248	9	US-10-530-253-5	Sequence 5, Appl
10	100.0	248	9	US-10-530-253-7	Sequence 7, Appl
11	100.0	248	9	US-10-530-253-9	Sequence 9, Appl
12	100.0	248	9	US-10-530-253-11	Sequence 11, Appl
13	100.0	256	11	US-11-192-923A-2	Sequence 2, Appl
14	100.0	15	9	US-10-530-061-1731	Sequence 1731, Ap
15	91.3	99	9	US-10-530-253-34	Sequence 34, Appl
16	91.3	99	9	US-10-530-061-1720	Sequence 1720, Ap
17	80.4	15	9	US-10-530-253-28	Sequence 28, Appl
18	76.1	395	9	US-10-467-657-5266	Sequence 5266, Ap
19	73.9	99	9	US-10-530-253-3060	Sequence 3060, Appl
20	73.9	324	11	US-11-188-298-3960	Sequence 3960, Ap
21	73.9	468	11	US-11-055-822-68	Sequence 68, Appl

22	73.9	468	11	US-11-239-674-66	Sequence 66, Appl
23	73.9	510	11	US-11-087-099-4252	Sequence 4252, Ap
24	73.9	510	11	US-11-188-298-14373	Sequence 14373, A
25	73.9	510	11	US-11-087-099-10725	Sequence 10725, A
26	73.9	646	11	US-11-188-298-9913	Sequence 9913, Ap
27	73.9	698	11	US-11-087-099-8952	Sequence 8952, Ap
28	73.9	698	11	US-11-087-099-9341	Sequence 9341, Ap
29	73.9	698	11	US-11-188-298-8685	Sequence 8685, Ap
30	73.9	698	11	US-11-188-298-19289	Sequence 19289, A
31	71.7	847	9	US-10-242-586-94	Sequence 94, Appl
32	71.7	847	9	US-10-242-902-94	Sequence 94, Appl
33	71.7	847	9	US-10-243-116-94	Sequence 94, Appl
34	71.7	847	9	US-10-243-136-94	Sequence 94, Appl
35	71.7	847	9	US-10-243-189-94	Sequence 94, Appl
36	71.7	847	9	US-10-243-215-94	Sequence 94, Appl
37	71.7	847	9	US-10-243-236-94	Sequence 94, Appl
38	71.7	847	9	US-10-243-298-94	Sequence 94, Appl
39	71.7	847	9	US-10-243-304-94	Sequence 94, Appl
40	71.7	847	9	US-10-243-338-94	Sequence 94, Appl
41	71.7	847	9	US-10-243-345-94	Sequence 94, Appl
42	71.7	847	9	US-10-243-357-94	Sequence 94, Appl
43	71.7	847	9	US-10-245-083-94	Sequence 94, Appl
44	71.7	847	9	US-10-247-015-94	Sequence 94, Appl
45	69.6	253	11	US-11-087-099-11582	Sequence 11582, A
46	69.6	276	11	US-11-045-004-1264	Sequence 1264, A
47	69.6	291	11	US-11-045-004-391	Sequence 391, Ap
48	69.6	548	9	US-10-493-909-77	Sequence 77, Appl
49	69.6	548	9	US-10-493-909-78	Sequence 78, Appl
50	67.4	15	9	US-10-530-061-1745	Sequence 1745, Ap
51	67.4	15	9	US-10-530-061-1751	Sequence 1751, Ap
52	67.4	98	9	US-10-530-253-36	Sequence 36, Appl
53	67.4	257	11	US-11-188-298-18028	Sequence 18028, A
54	67.4	319	11	US-11-087-099-2481	Sequence 2481, Ap
55	67.4	337	11	US-11-188-298-7979	Sequence 7979, Ap
56	67.4	344	11	US-11-072-512-2534	Sequence 2534, Ap
57	67.4	548	11	US-11-188-298-6827	Sequence 6827, Ap
58	67.4	600	11	US-11-188-298-14041	Sequence 14041, A
59	67.4	964	11	US-11-016-706-39	Sequence 39, Appl
60	67.4	976	11	US-11-203-251A-76	Sequence 76, Appl
61	65.2	15	9	US-10-530-061-1724	Sequence 1724, Ap
62	65.2	15	9	US-10-530-061-1750	Sequence 1750, Ap
63	65.2	57	11	US-11-264-096-2241	Sequence 2241, Ap
64	65.2	97	9	US-10-530-253-29	Sequence 29, Appl
65	65.2	336	11	US-11-188-298-6516	Sequence 6516, Ap
66	65.2	336	11	US-11-188-298-13233	Sequence 13233, A
67	65.2	365	9	US-10-763-112A-81	Sequence 81, Appl
68	65.2	435	11	US-11-098-686-10568	Sequence 10568, A
69	65.2	461	11	US-11-072-512-2367	Sequence 2367, Ap
70	65.2	483	11	US-11-188-298-12703	Sequence 12703, A
71	65.2	513	9	US-10-979-095-2	Sequence 2, Appl
72	65.2	599	11	US-11-079-463-9892	Sequence 9892, Ap
73	65.2	618	11	US-11-072-512-3605	Sequence 3605, Ap
74	65.2	764	11	US-11-188-298-22439	Sequence 22439, A
75	65.2	780	11	US-11-045-004-102	Sequence 102, Appl
76	65.2	864	11	US-11-194-246-343	Sequence 343, Appl
77	65.2	966	11	US-11-016-706-40	Sequence 40, Appl
78	65.2	3635	11	US-11-019-711-47	Sequence 47, Appl
79	63.0	137	11	US-11-165-067A-11	Sequence 11, Appl
80	63.0	156	11	US-11-045-004-2177	Sequence 2177, Ap
81	63.0	184	11	US-11-087-099-6552	Sequence 6552, Ap
82	63.0	200	11	US-11-098-686-10515	Sequence 10515, A
83	63.0	243	11	US-11-045-004-797	Sequence 797, Appl
84	63.0	253	9	US-10-485-517-373	Sequence 373, Appl
85	63.0	348	11	US-11-045-004-2586	Sequence 2586, Ap
86	63.0	398	11	US-11-188-298-18665	Sequence 18665, A
87	63.0	400	11	US-11-079-463-5896	Sequence 5896, Ap
88	63.0	407	11	US-11-098-686-10169	Sequence 10169, A
89	63.0	411	11	US-11-188-298-17523	Sequence 17523, A
90	63.0	412	11	US-11-087-099-3547	Sequence 3547, Ap
91	63.0	425	8	US-10-505-928-594	Sequence 594, Appl
92	63.0	425	11	US-11-219-995-8	Sequence 8, Appl
93	63.0	425	11	US-11-072-175-198	Sequence 198, Appl
94	63.0	425	11	US-11-299-122-2	Sequence 2, Appl

95	29	63.0	467	11	US-11-219-995-7	Sequence 7, Appl1	168	28	60.9	563	11	US-11-021-441-9	Sequence 9, Appl1
96	29	63.0	486	11	US-11-188-228-286	Sequence 286, App	169	28	60.9	574	9	US-10-966-483-31	Sequence 31, Appl1
97	29	63.0	620	11	US-11-072-512-2045	Sequence 2045, Ap	170	28	60.9	574	11	US-11-021-441-15	Sequence 15, Appl1
98	29	63.0	641	11	US-11-188-298-1204	Sequence 1204, Ap	171	28	60.9	581	9	US-10-966-483-27	Sequence 27, Appl1
99	29	63.0	724	11	US-11-079-463-10168	Sequence 10168, A	172	28	60.9	581	9	US-10-966-483-29	Sequence 29, Appl1
100	29	63.0	866	11	US-11-188-298-5746	Sequence 5746, Ap	173	28	60.9	581	11	US-11-021-441-11	Sequence 11, Appl1
101	29	63.0	935	9	US-10-995-561-1012	Sequence 1012, Ap	174	28	60.9	581	11	US-11-021-441-13	Sequence 13, Appl1
102	29	63.0	935	9	US-10-995-561-1013	Sequence 1013, Ap	175	28	60.9	591	11	US-11-188-298-1125	Sequence 2125, App
103	29	63.0	973	11	US-11-087-099-4325	Sequence 4325, Ap	176	28	60.9	626	11	US-11-045-004-447	Sequence 447, App
104	29	63.0	1075	9	US-10-745-586-197	Sequence 197, App	177	28	60.9	648	11	US-11-079-463-9792	Sequence 17916, A
105	29	63.0	1134	11	US-11-087-099-1744	Sequence 1744, Ap	178	28	60.9	654	11	US-11-079-463-9792	Sequence 7992, Ap
106	29	63.0	1140	11	US-11-087-099-11073	Sequence 11073, A	179	28	60.9	673	9	US-10-784-004-394	Sequence 394, App
107	29	63.0	1584	11	US-11-188-298-16493	Sequence 16493, A	180	28	60.9	673	9	US-10-784-004-937	Sequence 937, App
108	29	63.0	1524	8	US-10-512-386-56	Sequence 56, Appl3	181	28	60.9	676	9	US-10-784-004-716	Sequence 716, App
109	29	63.0	2304	9	US-10-530-773-310	Sequence 310, App	182	28	60.9	676	9	US-10-784-004-1084	Sequence 1084, App
110	29	63.0	7465	11	US-11-087-099-7521	Sequence 7521, Ap	183	28	60.9	700	11	US-11-098-686-10793	Sequence 10793, A
111	28	60.9	17	9	US-10-895-064-2899	Sequence 2899, Ap	184	28	60.9	718	11	US-11-096-568A-17915	Sequence 17915, A
112	28	60.9	17	9	US-11-129-741-2899	Sequence 2899, Ap	185	28	60.9	787	9	US-10-467-657-2832	Sequence 2832, Ap
113	28	60.9	141	11	US-11-119-098-1	Sequence 1, Appl1	186	28	60.9	807	11	US-11-096-568A-17914	Sequence 17914, A
114	28	60.9	157	11	US-11-096-568A-19538	Sequence 19538, A	187	28	60.9	848	11	US-11-096-568A-30056	Sequence 30056, A
115	28	60.9	183	11	US-11-172-740-2135	Sequence 2135, A	188	28	60.9	856	11	US-11-054-281-116	Sequence 116, App
116	28	60.9	187	11	US-11-087-099-5496	Sequence 5496, Ap	189	28	60.9	878	11	US-11-087-099-1384	Sequence 1384, Ap
117	28	60.9	187	11	US-11-087-099-7186	Sequence 7186, Ap	190	28	60.9	882	11	US-11-087-099-1398	Sequence 1398, Ap
118	28	60.9	198	11	US-11-255-547-2	Sequence 2, Appl1	191	28	60.9	882	11	US-11-188-298-1398	Sequence 1398, Ap
119	28	60.9	210	9	US-10-497-135-27	Sequence 27, Appl1	192	28	60.9	882	11	US-11-188-298-2823	Sequence 2823, Ap
120	28	60.9	210	9	US-10-497-135-28	Sequence 28, Appl1	193	28	60.9	882	11	US-11-188-298-10003	Sequence 10003, A
121	28	60.9	210	11	US-11-269-215-27	Sequence 27, Appl1	194	28	60.9	939	11	US-11-188-298-10003	Sequence 2, Appl1
122	28	60.9	210	11	US-11-269-215-27	Sequence 28, Appl1	195	28	60.9	976	9	US-10-966-483-2	Sequence 1, Appl1
123	28	60.9	213	11	US-11-096-568A-19537	Sequence 19537, A	196	28	60.9	976	9	US-10-511-279-1	Sequence 1, Appl1
124	28	60.9	236	11	US-11-054-281-118	Sequence 118, App	197	28	60.9	976	11	US-11-233-796-2	Sequence 2, Appl1
125	28	60.9	237	11	US-11-144-947-494	Sequence 494, App	198	28	60.9	976	11	US-11-072-175-138	Sequence 138, App
126	28	60.9	244	11	US-11-096-568A-10043	Sequence 10043, A	199	28	60.9	976	11	US-11-203-251A-77	Sequence 77, Appl1
127	28	60.9	255	11	US-11-096-568A-19536	Sequence 19536, A	200	28	60.9	991	11	US-11-096-568A-30055	Sequence 30055, A
128	28	60.9	274	11	US-11-079-463-6399	Sequence 6399, Ap	201	28	60.9	994	11	US-11-096-568A-30054	Sequence 30054, A
129	28	60.9	282	11	US-11-096-568A-10042	Sequence 10042, A	202	28	60.9	1032	11	US-11-014-367-3	Sequence 3, Appl1
130	28	60.9	294	9	US-10-513-931A-9	Sequence 9, Appl1	203	28	60.9	1035	9	US-10-966-483-20	Sequence 20, Appl1
131	28	60.9	308	11	US-11-173-740-1241	Sequence 1241, Ap	204	28	60.9	1035	11	US-11-021-441-4	Sequence 4, Appl1
132	28	60.9	312	11	US-11-054-281-32	Sequence 32, Appl1	205	28	60.9	1116	11	US-11-188-298-61023	Sequence 6023, Ap
133	28	60.9	312	11	US-11-054-281-320	Sequence 320, App	206	28	60.9	1116	11	US-11-087-099-1095	Sequence 1095, Ap
134	28	60.9	312	11	US-11-054-281-324	Sequence 324, App	207	28	60.9	1126	11	US-11-087-099-4533	Sequence 2533, Ap
135	28	60.9	312	11	US-11-072-512-2822	Sequence 2822, Ap	208	28	60.9	1130	11	US-11-087-099-6723	Sequence 6723, Ap
136	28	60.9	322	11	US-11-188-298-19156	Sequence 19156, A	209	28	60.9	1136	11	US-11-072-512-9233	Sequence 2933, Ap
137	28	60.9	327	11	US-11-188-298-10780	Sequence 10780, A	210	28	60.9	1294	11	US-11-188-298-9622	Sequence 9622, Ap
138	28	60.9	347	9	US-10-821-234-1136	Sequence 1136, Ap	211	28	60.9	1367	9	US-10-995-561-538	Sequence 538, App
139	28	60.9	356	9	US-10-506-454-769	Sequence 769, App	212	28	60.9	1367	9	US-10-510-903-10	Sequence 10, Appl1
140	28	60.9	357	11	US-11-087-099-3583	Sequence 3583, Ap	213	28	60.9	1367	11	US-11-113-202-18	Sequence 18, Appl1
141	28	60.9	357	11	US-11-188-298-3367	Sequence 3367, Ap	214	28	60.9	1368	9	US-10-995-561-539	Sequence 539, App
142	28	60.9	359	9	US-10-821-234-1396	Sequence 1396, Ap	215	28	60.9	3063	11	US-11-186-284-26	Sequence 26, Appl1
143	28	60.9	359	9	US-10-784-004-738	Sequence 738, App	216	28	60.9	3433	9	US-10-714-781A-67	Sequence 67, Appl1
144	28	60.9	359	11	US-11-188-298-19926	Sequence 14926, A	217	28	60.9	3433	11	US-11-223-729-2	Sequence 2, Appl1
145	28	60.9	360	11	US-11-188-298-14633	Sequence 14633, A	218	27	58.7	64	11	US-11-188-298-10871	Sequence 20871, A
146	28	60.9	361	11	US-11-188-298-2340	Sequence 2340, Ap	219	27	58.7	97	9	US-10-475-075-306	Sequence 306, App
147	28	60.9	362	11	US-11-087-099-3064	Sequence 3064, Ap	220	27	58.7	97	9	US-10-475-075-547	Sequence 547, App
148	28	60.9	362	11	US-11-188-298-2898	Sequence 2898, Ap	221	27	58.7	105	11	US-11-155-775-12	Sequence 12, Appl1
149	28	60.9	363	11	US-11-054-281-120	Sequence 120, App	222	27	58.7	105	11	US-11-193-512-82	Sequence 98, Appl1
150	28	60.9	368	11	US-11-096-568A-10041	Sequence 10041, A	223	27	58.7	127	11	US-11-193-512-98	Sequence 98, Appl1
151	28	60.9	375	11	US-11-079-463-7179	Sequence 7179, App	224	27	58.7	127	11	US-11-193-512-98	Sequence 98, Appl1
152	28	60.9	383	11	US-11-096-568A-24739	Sequence 24739, A	225	27	58.7	127	11	US-11-193-512-98	Sequence 98, Appl1
153	28	60.9	399	11	US-11-188-298-5973	Sequence 5973, Ap	226	27	58.7	134	11	US-11-045-004-2476	Sequence 2476, App
154	28	60.9	417	11	US-11-096-568A-24707	Sequence 1307, Ap	227	27	58.7	135	11	US-11-100-338-49	Sequence 49, Appl1
155	28	60.9	433	11	US-11-096-568A-24788	Sequence 24788, A	228	27	58.7	146	11	US-11-096-568A-16341	Sequence 16341, A
156	28	60.9	440	11	US-11-096-568A-32450	Sequence 32450, A	229	27	58.7	161	11	US-11-096-568A-10019	Sequence 10019, A
157	28	60.9	442	11	US-11-096-568A-24797	Sequence 24797, A	230	27	58.7	162	11	US-11-072-740-1237	Sequence 1237, Ap
158	28	60.9	459	11	US-11-087-099-6435	Sequence 6435, Ap	231	27	58.7	166	9	US-10-218-784-116	Sequence 16340, A
159	28	60.9	459	11	US-11-188-298-5867	Sequence 5867, Ap	232	27	58.7	166	9	US-10-218-784-116	Sequence 116, App
160	28	60.9	461	11	US-11-188-298-1428	Sequence 1428, Ap	233	27	58.7	166	9	US-10-218-784-116	Sequence 116, App
161	28	60.9	486	11	US-11-188-298-7991	Sequence 7991, Ap	234	27	58.7	166	9	US-10-218-784-116	Sequence 116, App
162	28	60.9	486	11	US-11-188-298-22007	Sequence 22007, A	235	27	58.7	166	9	US-10-218-784-116	Sequence 116, App
163	28	60.9	489	11	US-11-210-251-1	Sequence 1, Appl1	236	27	58.7	168	11	US-11-108-172-631	Sequence 631, App
164	28	60.9	502	9	US-10-966-483-23	Sequence 23, Appl1	237	27	58.7	170	11	US-10-522-153-4	Sequence 4, Appl1
165	28	60.9	502	9	US-11-021-441-7	Sequence 2140, Ap	238	27	58.7	170	11	US-11-134-811-51	Sequence 51, Appl1
166	28	60.9	543	11	US-11-072-512-2140	Sequence 25, Appl1	239	27	58.7	176	11	US-11-096-568A-767	Sequence 767, App
167	28	60.9	563	9	US-10-966-483-25	Sequence 25, Appl1	240	27	58.7	176	11	US-11-096-568A-767	Sequence 767, App

241	27	58.7	193	11	US-11-079-463-6181	Sequence 6181, App	314	27	58.7	415	11	US-11-055-822-816	Sequence 816, App
242	27	58.7	201	11	US-11-072-512-3518	Sequence 3518, App	315	27	58.7	419	11	US-11-096-568A-10209	Sequence 10209, A
243	27	58.7	203	11	US-11-096-568A-22713	Sequence 22713, A	316	27	58.7	419	11	US-11-188-298-16523	Sequence 16523, A
244	27	58.7	206	11	US-11-096-568A-16339	Sequence 16339, A	317	27	58.7	426	11	US-11-087-099-1492	Sequence 1492, App
245	27	58.7	207	11	US-11-188-298-9072	Sequence 9072, App	318	27	58.7	426	11	US-11-188-298-2607	Sequence 2607, App
246	27	58.7	208	11	US-11-128-440-6	Sequence 6, App1	319	27	58.7	427	11	US-11-087-099-1196	Sequence 1196, App
247	27	58.7	210	9	US-10-330-773-614	Sequence 614, App	320	27	58.7	427	11	US-11-096-568A-33431	Sequence 33431, A
248	27	58.7	211	11	US-11-188-298-21549	Sequence 21549, App	321	27	58.7	427	11	US-11-188-298-1543	Sequence 1543, App
249	27	58.7	220	11	US-11-096-568A-22712	Sequence 22712, A	322	27	58.7	427	11	US-11-188-298-1858	Sequence 1858, App
250	27	58.7	229	9	US-10-330-773-616	Sequence 616, App	323	27	58.7	427	11	US-11-188-298-6744	Sequence 6744, App
251	27	58.7	232	9	US-10-745-586-139	Sequence 139, App	324	27	58.7	427	11	US-11-188-298-1337	Sequence 14337, A
252	27	58.7	235	9	US-10-453-372-406	Sequence 406, App	325	27	58.7	427	11	US-11-188-298-16468	Sequence 16468, A
253	27	58.7	235	9	US-10-453-372-408	Sequence 408, App	326	27	58.7	427	11	US-11-188-298-17629	Sequence 17629, App
254	27	58.7	236	11	US-11-096-568A-25135	Sequence 25135, A	327	27	58.7	428	11	US-11-188-298-5953	Sequence 5953, App
255	27	58.7	239	9	US-10-453-372-400	Sequence 400, App	328	27	58.7	429	11	US-11-096-568A-3400	Sequence 3400, App
256	27	58.7	239	9	US-10-453-372-402	Sequence 402, App	329	27	58.7	429	11	US-11-188-298-1289	Sequence 1289, App
257	27	58.7	239	9	US-10-453-372-404	Sequence 404, App	330	27	58.7	430	11	US-11-188-298-3939	Sequence 3939, App
258	27	58.7	248	11	US-11-096-568A-10018	Sequence 10018, A	331	27	58.7	431	11	US-11-188-298-3818	Sequence 3818, App
259	27	58.7	249	11	US-11-045-004-287	Sequence 287, App	332	27	58.7	431	11	US-11-188-298-20784	Sequence 20784, A
260	27	58.7	252	9	US-10-455-772-216	Sequence 216, App	333	27	58.7	431	11	US-11-096-568A-7208	Sequence 7208, App
261	27	58.7	252	11	US-11-098-686-10557	Sequence 10557, A	334	27	58.7	433	11	US-11-087-099-3059	Sequence 3059, App
262	27	58.7	253	11	US-11-096-568A-766	Sequence 766, App	335	27	58.7	434	11	US-11-087-099-10241	Sequence 10241, A
263	27	58.7	257	11	US-11-057-012-93	Sequence 93, App1	336	27	58.7	435	9	US-10-786-065-5	Sequence 5, App1
264	27	58.7	257	11	US-11-092-168-5	Sequence 5, App1	337	27	58.7	435	9	US-10-786-065-5	Sequence 5, App1
265	27	58.7	258	11	US-11-096-568A-33505	Sequence 33505, A	338	27	58.7	442	11	US-11-055-822-814	Sequence 814, App1
266	27	58.7	259	9	US-10-878-556A-122	Sequence 122, App	339	27	58.7	446	11	US-11-188-298-11895	Sequence 11895, A
267	27	58.7	263	11	US-11-172-740-1238	Sequence 1238, App	340	27	58.7	448	11	US-11-096-568A-7207	Sequence 7207, App
268	27	58.7	265	11	US-11-172-740-1240	Sequence 1240, App	341	27	58.7	449	11	US-11-096-568A-10207	Sequence 10207, A
269	27	58.7	269	11	US-11-172-740-1239	Sequence 1239, App	342	27	58.7	479	11	US-11-087-099-11307	Sequence 11307, A
270	27	58.7	292	11	US-11-096-568A-25134	Sequence 25134, A	343	27	58.7	486	11	US-11-024-959-279	Sequence 279, App
271	27	58.7	304	11	US-11-096-568A-33504	Sequence 33504, A	344	27	58.7	494	11	US-11-087-099-9605	Sequence 9605, App
272	27	58.7	304	11	US-11-172-740-1236	Sequence 1236, App	345	27	58.7	500	9	US-10-524-647-20	Sequence 20, App1
273	27	58.7	314	11	US-11-087-099-5913	Sequence 5913, App	346	27	58.7	500	9	US-10-524-972-20	Sequence 20, App1
274	27	58.7	315	9	US-10-506-454-1518	Sequence 1518, App	347	27	58.7	500	9	US-10-541-513-8	Sequence 8, App1
275	27	58.7	319	11	US-11-096-568A-765	Sequence 765, App	348	27	58.7	501	11	US-11-087-099-5397	Sequence 5397, App
276	27	58.7	319	11	US-11-096-568A-25133	Sequence 25133, A	349	27	58.7	501	11	US-11-087-099-8133	Sequence 8133, App
277	27	58.7	320	11	US-11-096-568A-10017	Sequence 10017, A	350	27	58.7	501	11	US-11-087-099-9295	Sequence 9295, App
278	27	58.7	322	11	US-11-096-568A-22711	Sequence 22711, A	351	27	58.7	503	11	US-11-087-099-9982	Sequence 9082, App
279	27	58.7	324	11	US-11-096-568A-25533	Sequence 25533, A	352	27	58.7	510	11	US-11-045-004-1518	Sequence 1519, App
280	27	58.7	332	11	US-11-188-298-1683	Sequence 1683, App	353	27	58.7	511	11	US-11-087-099-5928	Sequence 5928, App
281	27	58.7	332	11	US-11-188-298-13440	Sequence 13440, A	354	27	58.7	512	11	US-11-087-099-6798	Sequence 6798, App
282	27	58.7	333	11	US-11-079-463-5375	Sequence 5375, App	355	27	58.7	516	11	US-11-216-267-36	Sequence 36, App1
283	27	58.7	334	11	US-11-087-099-11034	Sequence 11034, A	356	27	58.7	521	9	US-10-455-772-212	Sequence 212, App1
284	27	58.7	336	11	US-11-096-568A-25532	Sequence 25532, A	357	27	58.7	531	11	US-11-214-139-63	Sequence 63, App1
285	27	58.7	336	11	US-11-188-298-10146	Sequence 10146, A	358	27	58.7	536	11	US-11-018-866-42	Sequence 42, App1
286	27	58.7	336	11	US-11-188-298-20159	Sequence 20159, A	359	27	58.7	537	11	US-11-087-099-2165	Sequence 2165, App1
287	27	58.7	338	11	US-11-188-298-17125	Sequence 17125, A	360	27	58.7	539	11	US-11-069-642-16	Sequence 16, App1
288	27	58.7	343	9	US-10-786-065-2	Sequence 2, App1	361	27	58.7	550	11	US-11-188-298-7256	Sequence 7256, App
289	27	58.7	344	11	US-11-188-298-22047	Sequence 22047, A	362	27	58.7	558	11	US-11-096-568A-31859	Sequence 31859, A
290	27	58.7	346	11	US-11-188-298-21405	Sequence 21405, A	363	27	58.7	558	11	US-11-096-568A-31858	Sequence 31858, A
291	27	58.7	353	11	US-11-188-298-14220	Sequence 14220, A	364	27	58.7	559	11	US-11-096-568A-31857	Sequence 31857, A
292	27	58.7	353	11	US-11-188-298-17563	Sequence 17563, A	365	27	58.7	572	11	US-11-201-916-25	Sequence 25, App1
293	27	58.7	362	11	US-11-096-568A-26576	Sequence 26576, A	366	27	58.7	575	11	US-11-188-298-11893	Sequence 11893, A
294	27	58.7	371	11	US-11-188-298-6260	Sequence 6260, App	367	27	58.7	587	11	US-11-096-568A-31857	Sequence 31857, A
295	27	58.7	380	11	US-11-087-099-1795	Sequence 1795, App	368	27	58.7	589	11	US-11-096-568A-30190	Sequence 30190, A
296	27	58.7	388	11	US-11-046-668-7	Sequence 7, App1	369	27	58.7	589	11	US-11-188-298-5949	Sequence 5949, App
297	27	58.7	392	11	US-11-188-298-2511	Sequence 2511, App	370	27	58.7	589	11	US-11-188-298-8319	Sequence 8319, App
298	27	58.7	392	11	US-11-188-298-11634	Sequence 11634, A	371	27	58.7	590	9	US-10-330-773-124	Sequence 124, App
299	27	58.7	392	11	US-11-188-298-13443	Sequence 13443, A	372	27	58.7	591	11	US-11-188-298-9610	Sequence 9610, App
300	27	58.7	393	11	US-11-188-298-16789	Sequence 16789, A	373	27	58.7	594	9	US-10-330-773-121	Sequence 121, App
301	27	58.7	394	11	US-11-052-554A-79	Sequence 79, App1	374	27	58.7	595	9	US-10-455-772-214	Sequence 214, App
302	27	58.7	396	11	US-11-188-298-6859	Sequence 6859, App	375	27	58.7	595	9	US-10-455-772-224	Sequence 224, App
303	27	58.7	398	11	US-11-046-668-9	Sequence 9, App1	376	27	58.7	595	9	US-10-455-772-226	Sequence 226, App
304	27	58.7	404	11	US-11-079-463-8737	Sequence 8737, App	377	27	58.7	595	9	US-10-455-772-230	Sequence 230, App
305	27	58.7	405	11	US-11-188-298-11243	Sequence 11243, A	378	27	58.7	595	9	US-10-455-772-232	Sequence 232, App
306	27	58.7	406	11	US-11-188-298-18864	Sequence 18864, A	379	27	58.7	595	9	US-10-455-772-234	Sequence 234, App
307	27	58.7	409	11	US-11-188-298-18864	Sequence 18864, A	380	27	58.7	595	9	US-10-455-772-236	Sequence 236, App
308	27	58.7	410	11	US-11-096-568A-33432	Sequence 33432, A	381	27	58.7	595	9	US-10-455-772-238	Sequence 238, App
309	27	58.7	410	11	US-11-188-298-339	Sequence 339, App	382	27	58.7	595	9	US-10-455-772-240	Sequence 240, App
310	27	58.7	412	9	US-10-858-730-82	Sequence 82, App1	383	27	58.7	595	9	US-10-455-772-242	Sequence 242, App
311	27	58.7	414	11	US-11-096-568A-12745	Sequence 12745, A	384	27	58.7	596	9	US-10-455-772-220	Sequence 220, App
312	27	58.7	414	11	US-11-188-298-7204	Sequence 7204, App	385	27	58.7	596	9	US-10-455-772-220	Sequence 220, App
313	27	58.7	414	11	US-11-188-298-11713	Sequence 11713, A	386	27	58.7	596	9	US-10-455-772-222	Sequence 222, App

387	27	58.7	600	11	US-11-096-568A-32116	Sequence 32116, A	460	27	58.7	673	11	US-11-224-624-58	Sequence 58, Appl
388	27	58.7	601	11	US-11-072-512-2566	Sequence 2566, Ap	461	27	58.7	673	11	US-11-224-624-60	Sequence 60, Appl
389	27	58.7	603	11	US-11-096-568A-30189	Sequence 30189, A	462	27	58.7	673	11	US-11-224-624-62	Sequence 62, Appl
390	27	58.7	604	9	US-10-455-772-218	Sequence 218, App	463	27	58.7	673	11	US-11-224-624-64	Sequence 64, Appl
391	27	58.7	616	11	US-11-058-727-16	Sequence 16, Appl	464	27	58.7	673	11	US-11-224-624-66	Sequence 66, Appl
392	27	58.7	616	11	US-11-108-389-16	Sequence 16, Appl	465	27	58.7	673	11	US-11-224-624-68	Sequence 68, Appl
393	27	58.7	616	11	US-11-224-624-16	Sequence 16, Appl	466	27	58.7	673	11	US-11-224-624-70	Sequence 70, Appl
394	27	58.7	620	11	US-11-058-727-20	Sequence 20, Appl	467	27	58.7	673	11	US-11-224-624-76	Sequence 76, Appl
395	27	58.7	620	11	US-11-108-389-20	Sequence 20, Appl	468	27	58.7	673	11	US-11-224-624-88	Sequence 88, Appl
396	27	58.7	622	11	US-11-224-624-20	Sequence 20, Appl	469	27	58.7	673	11	US-11-224-624-94	Sequence 94, Appl
397	27	58.7	622	11	US-11-188-298-15979	Sequence 15979, A	470	27	58.7	673	11	US-11-224-624-92	Sequence 92, Appl
398	27	58.7	628	11	US-11-087-099-8127	Sequence 8127, Ap	471	27	58.7	673	11	US-11-224-624-94	Sequence 94, Appl
399	27	58.7	633	9	US-10-912-580-7	Sequence 7, Appl	472	27	58.7	674	11	US-11-058-727-4	Sequence 4, Appl
400	27	58.7	633	9	US-10-912-582-1	Sequence 1, Appl	473	27	58.7	674	11	US-11-058-727-50	Sequence 50, Appl
401	27	58.7	660	11	US-11-186-284-125	Sequence 125, App	474	27	58.7	674	11	US-11-058-727-6	Sequence 76, Appl
402	27	58.7	666	11	US-11-096-568A-32115	Sequence 32115, A	475	27	58.7	674	11	US-11-058-727-82	Sequence 82, Appl
403	27	58.7	668	11	US-11-188-298-768	Sequence 768, App	476	27	58.7	674	11	US-11-108-389-44	Sequence 44, Appl
404	27	58.7	669	11	US-11-058-727-6	Sequence 6, Appl	477	27	58.7	674	11	US-11-108-389-50	Sequence 50, Appl
405	27	58.7	669	11	US-11-058-727-12	Sequence 12, Appl	478	27	58.7	674	11	US-11-108-389-76	Sequence 76, Appl
406	27	58.7	669	11	US-11-108-389-6	Sequence 6, Appl	479	27	58.7	674	11	US-11-108-389-82	Sequence 82, Appl
407	27	58.7	669	11	US-11-108-389-12	Sequence 12, Appl	480	27	58.7	674	11	US-11-224-624-44	Sequence 44, Appl
408	27	58.7	669	11	US-11-224-624-6	Sequence 6, Appl	481	27	58.7	674	11	US-11-224-624-50	Sequence 50, Appl
409	27	58.7	669	11	US-11-224-624-12	Sequence 12, Appl	482	27	58.7	674	11	US-11-224-624-76	Sequence 76, Appl
410	27	58.7	670	11	US-11-096-568A-32114	Sequence 32114, A	483	27	58.7	675	11	US-11-224-624-82	Sequence 82, Appl
411	27	58.7	671	11	US-11-188-298-9026	Sequence 9026, Ap	484	27	58.7	675	11	US-11-058-727-42	Sequence 42, Appl
412	27	58.7	673	11	US-11-058-727-8	Sequence 8, Appl	485	27	58.7	675	11	US-11-058-727-46	Sequence 46, Appl
413	27	58.7	673	11	US-11-058-727-14	Sequence 14, Appl	486	27	58.7	675	11	US-11-058-727-48	Sequence 48, Appl
414	27	58.7	673	11	US-11-058-727-22	Sequence 22, Appl	487	27	58.7	675	11	US-11-058-727-74	Sequence 74, Appl
415	27	58.7	673	11	US-11-058-727-26	Sequence 26, Appl	488	27	58.7	675	11	US-11-058-727-80	Sequence 80, Appl
416	27	58.7	673	11	US-11-058-727-30	Sequence 30, Appl	489	27	58.7	675	11	US-11-058-727-80	Sequence 80, Appl
417	27	58.7	673	11	US-11-058-727-34	Sequence 34, Appl	490	27	58.7	675	11	US-11-108-389-42	Sequence 42, Appl
418	27	58.7	673	11	US-11-058-727-54	Sequence 54, Appl	491	27	58.7	675	11	US-11-108-389-46	Sequence 46, Appl
419	27	58.7	673	11	US-11-058-727-56	Sequence 56, Appl	492	27	58.7	675	11	US-11-108-389-48	Sequence 48, Appl
420	27	58.7	673	11	US-11-058-727-58	Sequence 58, Appl	493	27	58.7	675	11	US-11-108-389-78	Sequence 78, Appl
421	27	58.7	673	11	US-11-058-727-60	Sequence 60, Appl	494	27	58.7	675	11	US-11-108-389-80	Sequence 80, Appl
422	27	58.7	673	11	US-11-058-727-62	Sequence 62, Appl	495	27	58.7	675	11	US-11-224-624-82	Sequence 82, Appl
423	27	58.7	673	11	US-11-058-727-66	Sequence 66, Appl	496	27	58.7	675	11	US-11-224-624-46	Sequence 46, Appl
424	27	58.7	673	11	US-11-058-727-66	Sequence 66, Appl	497	27	58.7	675	11	US-11-224-624-48	Sequence 48, Appl
425	27	58.7	673	11	US-11-058-727-68	Sequence 68, Appl	498	27	58.7	675	11	US-11-224-624-74	Sequence 74, Appl
426	27	58.7	673	11	US-11-058-727-70	Sequence 70, Appl	499	27	58.7	675	11	US-11-224-624-78	Sequence 78, Appl
427	27	58.7	673	11	US-11-058-727-86	Sequence 86, Appl	500	27	58.7	675	11	US-11-224-624-80	Sequence 80, Appl
428	27	58.7	673	11	US-11-058-727-88	Sequence 88, Appl	501	27	58.7	675	11	US-11-058-727-80	Sequence 80, Appl
429	27	58.7	673	11	US-11-058-727-90	Sequence 90, Appl	502	27	58.7	676	11	US-11-058-727-40	Sequence 40, Appl
430	27	58.7	673	11	US-11-058-727-92	Sequence 92, Appl	503	27	58.7	676	11	US-11-058-727-72	Sequence 72, Appl
431	27	58.7	673	11	US-11-058-727-94	Sequence 94, Appl	504	27	58.7	676	11	US-11-108-389-40	Sequence 40, Appl
432	27	58.7	673	11	US-11-108-389-14	Sequence 8, Appl	505	27	58.7	676	11	US-11-108-389-42	Sequence 42, Appl
433	27	58.7	673	11	US-11-108-389-18	Sequence 14, Appl	506	27	58.7	676	11	US-11-224-624-40	Sequence 70, Appl
434	27	58.7	673	11	US-11-108-389-22	Sequence 22, Appl	507	27	58.7	676	11	US-11-224-624-72	Sequence 72, Appl
435	27	58.7	673	11	US-11-108-389-26	Sequence 26, Appl	508	27	58.7	677	11	US-11-058-727-52	Sequence 52, Appl
436	27	58.7	673	11	US-11-108-389-30	Sequence 30, Appl	509	27	58.7	677	11	US-11-058-727-84	Sequence 84, Appl
437	27	58.7	673	11	US-11-108-389-34	Sequence 34, Appl	510	27	58.7	677	11	US-11-108-389-82	Sequence 52, Appl
438	27	58.7	673	11	US-11-108-389-54	Sequence 54, Appl	511	27	58.7	677	11	US-11-108-389-84	Sequence 84, Appl
439	27	58.7	673	11	US-11-108-389-56	Sequence 56, Appl	512	27	58.7	677	11	US-11-224-624-52	Sequence 52, Appl
440	27	58.7	673	11	US-11-108-389-58	Sequence 58, Appl	513	27	58.7	677	11	US-11-224-624-84	Sequence 84, Appl
441	27	58.7	673	11	US-11-108-389-60	Sequence 60, Appl	514	27	58.7	677	11	US-11-096-568A-30188	Sequence 30188, A
442	27	58.7	673	11	US-11-108-389-62	Sequence 62, Appl	515	27	58.7	685	11	US-11-169-041-194	Sequence 194, App
443	27	58.7	673	11	US-11-108-389-64	Sequence 64, Appl	516	27	58.7	685	11	US-11-169-041-194	Sequence 194, App
444	27	58.7	673	11	US-11-108-389-66	Sequence 66, Appl	517	27	58.7	706	9	US-11-188-298-11914	Sequence 917, App
445	27	58.7	673	11	US-11-108-389-68	Sequence 68, Appl	518	27	58.7	708	9	US-10-821-234-917	Sequence 2224, Ap
446	27	58.7	673	11	US-11-108-389-70	Sequence 70, Appl	519	27	58.7	724	11	US-11-072-512-2224	Sequence 194, App
447	27	58.7	673	11	US-11-108-389-86	Sequence 86, Appl	520	27	58.7	743	9	US-10-915-002-194	Sequence 6350, Ap
448	27	58.7	673	11	US-11-108-389-88	Sequence 88, Appl	521	27	58.7	750	11	US-11-188-298-6350	Sequence 48, Appl
449	27	58.7	673	11	US-11-108-389-90	Sequence 90, Appl	522	27	58.7	753	11	US-11-077-619-48	Sequence 1188, Ap
450	27	58.7	673	11	US-11-108-389-92	Sequence 92, Appl	523	27	58.7	753	11	US-11-188-298-1188	Sequence 3350, Ap
451	27	58.7	673	11	US-11-108-389-94	Sequence 94, Appl	524	27	58.7	753	11	US-11-188-298-3394	Sequence 3295, Ap
452	27	58.7	673	11	US-11-224-624-8	Sequence 8, Appl	525	27	58.7	753	11	US-11-188-298-6275	Sequence 6275, Ap
453	27	58.7	673	11	US-11-224-624-14	Sequence 14, Appl	526	27	58.7	753	11	US-11-188-298-9131	Sequence 7931, Ap
454	27	58.7	673	11	US-11-224-624-22	Sequence 22, Appl	527	27	58.7	753	11	US-11-188-298-9131	Sequence 9131, Ap
455	27	58.7	673	11	US-11-224-624-26	Sequence 26, Appl	528	27	58.7	753	11	US-11-188-298-10266	Sequence 10266, A
456	27	58.7	673	11	US-11-224-624-30	Sequence 30, Appl	529	27	58.7	753	11	US-11-188-298-10836	Sequence 10836, A
457	27	58.7	673	11	US-11-224-624-34	Sequence 34, Appl	530	27	58.7	753	11	US-11-188-298-11157	Sequence 11157, A
458	27	58.7	673	11	US-11-224-624-54	Sequence 54, Appl	531	27	58.7	753	11	US-11-188-298-1157	Sequence 15649, A
459	27	58.7	673	11	US-11-224-624-56	Sequence 56, Appl	532	27	58.7	753	11	US-11-188-298-15649	Sequence 15649, A

533	27	58.7	753	11	US-11-188-298-15927	Sequence 15927, A	606	26	56.5	60	9	US-10-853-807A-50	Sequence 50, Appl
534	27	58.7	753	11	US-11-188-298-16233	Sequence 16233, A	607	26	56.5	68	11	US-11-096-5568A-13903	Sequence 13903, A
535	27	58.7	753	11	US-11-188-298-18769	Sequence 18769, A	608	26	56.5	72	9	US-10-467-657-6668	Sequence 6668, Ap
536	27	58.7	753	11	US-11-188-298-19779	Sequence 19779, A	609	26	56.5	77	11	US-11-144-947-561	Sequence 561, App
537	27	58.7	753	11	US-11-188-298-20176	Sequence 20176, A	610	26	56.5	78	11	US-11-144-947-407	Sequence 407, App
538	27	58.7	753	11	US-11-188-298-20212	Sequence 20212, A	611	26	56.5	91	11	US-11-264-096-1626	Sequence 1626, Ap
539	27	58.7	753	11	US-11-188-298-22446	Sequence 22446, A	612	26	56.5	99	7	US-09-978-360A-411	Sequence 411, App
540	27	58.7	755	11	US-11-098-686-11087	Sequence 11087, A	613	26	56.5	9	7	US-09-978-360A-706	Sequence 706, App
541	27	58.7	755	11	US-11-087-099-7759	Sequence 7759, A	614	26	56.5	107	9	US-10-530-253-37	Sequence 37, Appl
542	27	58.7	752	11	US-11-087-099-3342	Sequence 3342, Ap	615	26	56.5	111	9	US-10-485-788A-781	Sequence 781, App
543	27	58.7	762	11	US-11-188-298-3131	Sequence 3131, Ap	616	26	56.5	111	11	US-11-053-076-163	Sequence 163, App
544	27	58.7	766	9	US-10-821-234-1691	Sequence 1691, Ap	617	26	56.5	112	11	US-11-045-004-207	Sequence 207, App
545	27	58.7	778	11	US-11-188-298-8840	Sequence 8840, Ap	618	26	56.5	115	11	US-11-079-463-8392	Sequence 8392, Ap
546	27	58.7	800	11	US-11-024-959-471	Sequence 471, App	619	26	56.5	133	11	US-11-096-568A-14187	Sequence 14187, A
547	27	58.7	800	11	US-11-024-959-511	Sequence 511, App	620	26	56.5	143	9	US-10-506-454-428	Sequence 428, App
548	27	58.7	821	9	US-10-912-580-9	Sequence 9, Appl	621	26	56.5	150	11	US-11-036-676-20	Sequence 20, Appl
549	27	58.7	821	9	US-10-912-582-3	Sequence 3, Appl	622	26	56.5	152	7	US-09-978-360A-452	Sequence 452, App
550	27	58.7	821	11	US-11-050-857-964	Sequence 964, App	623	26	56.5	152	9	US-10-216-161A-190	Sequence 190, App
551	27	58.7	821	11	US-11-043-806-484	Sequence 484, App	624	26	56.5	153	9	US-10-506-454-388	Sequence 388, App
552	27	58.7	845	11	US-11-147-047-46	Sequence 46, Appl	625	26	56.5	158	11	US-11-038-676-30	Sequence 30, Appl
553	27	58.7	845	11	US-11-264-096-483	Sequence 483, App	626	26	56.5	160	11	US-11-096-568A-28091	Sequence 28091, A
554	27	58.7	882	9	US-10-912-580-8	Sequence 8, Appl	627	26	56.5	165	11	US-11-096-568A-14922	Sequence 14922, A
555	27	58.7	882	9	US-10-912-582-2	Sequence 2, Appl	628	26	56.5	166	11	US-11-188-298-15737	Sequence 15737, A
556	27	58.7	882	11	US-11-050-857-95	Sequence 95, Appl	629	26	56.5	167	11	US-11-072-512-2698	Sequence 2698, Ap
557	27	58.7	882	11	US-11-043-806-384	Sequence 384, Appl	630	26	56.5	168	11	US-11-026-198-38	Sequence 38, Appl
558	27	58.7	896	11	US-11-218-020-15	Sequence 15, Appl	631	26	56.5	169	11	US-11-188-298-20585	Sequence 20585, A
559	27	58.7	901	11	US-11-050-857-963	Sequence 963, App	632	26	56.5	170	9	US-10-467-657-104	Sequence 104, App
560	27	58.7	901	11	US-11-043-806-483	Sequence 483, App	633	26	56.5	170	9	US-10-467-657-8078	Sequence 8078, App
561	27	58.7	903	11	US-11-096-568A-30089	Sequence 30089, A	634	26	56.5	172	9	US-10-821-234-1338	Sequence 1338, Ap
562	27	58.7	934	11	US-11-096-568A-30088	Sequence 30088, A	635	26	56.5	188	9	US-10-506-454-393	Sequence 393, App
563	27	58.7	955	11	US-11-096-568A-30087	Sequence 30087, A	636	26	56.5	190	11	US-11-087-099-8048	Sequence 8048, Ap
564	27	58.7	1019	11	US-11-079-463-7842	Sequence 7842, Ap	637	26	56.5	193	11	US-11-096-568A-14921	Sequence 14921, A
565	27	58.7	1039	8	US-10-511-937-2429	Sequence 2429, Ap	638	26	56.5	211	9	US-10-784-004-379	Sequence 379, App
566	27	58.7	1068	9	US-10-453-372-1084	Sequence 1084, Ap	639	26	56.5	197	9	US-10-784-004-933	Sequence 933, App
567	27	58.7	1068	9	US-10-453-372-1090	Sequence 1090, Ap	640	26	56.5	199	11	US-11-096-568A-3918	Sequence 3918, Ap
568	27	58.7	1077	9	US-10-453-372-1086	Sequence 1086, Ap	641	26	56.5	200	11	US-11-188-298-20579	Sequence 20579, A
569	27	58.7	1093	9	US-10-453-372-1088	Sequence 1088, Ap	642	26	56.5	204	11	US-11-096-568A-18486	Sequence 18486, A
570	27	58.7	1115	9	US-10-194-487-440	Sequence 440, App	643	26	56.5	208	11	US-11-096-568A-18590	Sequence 18590, A
571	27	58.7	1115	9	US-10-195-883-440	Sequence 440, App	644	26	56.5	210	11	US-11-087-099-12364	Sequence 12364, A
572	27	58.7	1115	9	US-10-195-888-440	Sequence 440, App	645	26	56.5	210	9	US-10-454-437-242	Sequence 242, App
573	27	58.7	1115	9	US-10-195-889-440	Sequence 440, App	646	26	56.5	211	11	US-11-116-943-2	Sequence 2, Appl
574	27	58.7	1121	11	US-11-087-099-10482	Sequence 10482, A	647	26	56.5	215	9	US-10-821-234-1544	Sequence 1544, App
575	27	58.7	1206	11	US-11-058-727-2	Sequence 2, Appl	648	26	56.5	232	11	US-11-096-568A-18589	Sequence 18589, A
576	27	58.7	1206	11	US-11-108-389-2	Sequence 2, Appl	649	26	56.5	232	11	US-11-096-568A-38090	Sequence 38090, A
577	27	58.7	1206	11	US-11-224-624-2	Sequence 2, Appl	650	26	56.5	235	11	US-11-188-298-11924	Sequence 11924, A
578	27	58.7	1207	9	US-10-755-092-7	Sequence 7, Appl	651	26	56.5	235	11	US-11-188-298-21377	Sequence 21377, A
579	27	58.7	1210	11	US-11-058-727-4	Sequence 4, Appl	652	26	56.5	244	11	US-11-096-568A-18485	Sequence 18485, A
580	27	58.7	1210	11	US-11-108-389-4	Sequence 4, Appl	653	26	56.5	247	9	US-10-537-697-11	Sequence 11, Appl
581	27	58.7	1210	11	US-11-108-389-4	Sequence 4, Appl	654	26	56.5	247	11	US-11-172-740-566	Sequence 566, App
582	27	58.7	1282	9	US-10-510-941-18	Sequence 18, Appl	655	26	56.5	247	11	US-11-188-298-21639	Sequence 21639, A
583	27	58.7	1649	9	US-10-995-561-974	Sequence 974, App	656	26	56.5	248	9	US-10-067-974-6	Sequence 6, Appl
584	27	58.7	1694	11	US-11-135-855-36	Sequence 36, Appl	657	26	56.5	248	11	US-11-055-822-36	Sequence 36, Appl
585	27	58.7	1700	9	US-10-453-372-398	Sequence 398, App	658	26	56.5	248	11	US-11-239-674-34	Sequence 34, Appl
586	27	58.7	1700	9	US-10-453-372-412	Sequence 412, App	659	26	56.5	251	9	US-10-485-788A-509	Sequence 509, App
587	27	58.7	1700	9	US-10-453-372-414	Sequence 414, App	660	26	56.5	251	11	US-10-485-788A-509	Sequence 509, App
588	27	58.7	1700	9	US-10-453-372-416	Sequence 416, App	661	26	56.5	258	11	US-10-131-826A-14920	Sequence 14920, A
589	27	58.7	1700	9	US-10-453-372-418	Sequence 418, App	662	26	56.5	259	9	US-10-131-826A-304	Sequence 304, App
590	27	58.7	1709	9	US-10-453-372-418	Sequence 418, App	663	26	56.5	259	9	US-10-137-873A-304	Sequence 304, App
591	27	58.7	1709	9	US-10-453-372-410	Sequence 410, App	664	26	56.5	259	9	US-10-137-873A-304	Sequence 304, App
592	27	58.7	1709	11	US-11-135-855-35	Sequence 35, Appl	665	26	56.5	259	11	US-10-152-370-304	Sequence 304, App
593	27	58.7	1827	9	US-10-784-004-758	Sequence 758, App	666	26	56.5	259	11	US-11-290-153-304	Sequence 304, App
594	27	58.7	1827	9	US-10-784-004-761	Sequence 761, App	667	26	56.5	262	11	US-11-096-568A-31750	Sequence 31750, A
595	27	58.7	1827	9	US-10-784-004-1102	Sequence 1102, Ap	668	26	56.5	263	11	US-11-087-099-8618	Sequence 8618, Ap
596	27	58.7	1897	9	US-10-821-234-1635	Sequence 1635, Ap	669	26	56.5	267	11	US-10-507-720-41	Sequence 41, Appl
597	27	58.7	1907	11	US-11-000-463-250	Sequence 250, App	670	26	56.5	267	11	US-11-096-568A-19687	Sequence 19687, A
598	27	58.7	1912	11	US-11-288-493-64	Sequence 64, Appl	671	26	56.5	269	9	US-10-131-826A-532	Sequence 532, App
599	27	58.7	1927	11	US-11-288-493-64	Sequence 64, Appl	672	26	56.5	269	9	US-10-137-873A-532	Sequence 532, App
600	27	58.7	3623	11	US-10-995-561-593	Sequence 593, App	673	26	56.5	269	9	US-10-152-370-532	Sequence 532, App
601	27	58.7	3716	11	US-11-052-554A-141	Sequence 141, App	675	26	56.5	269	11	US-11-290-153-532	Sequence 532, App
602	27	58.7	3969	9	US-10-974-137A-59	Sequence 59, Appl	676	26	56.5	270	9	US-10-467-657-5806	Sequence 5806, App
603	26	56.5	46	9	US-10-467-657-6672	Sequence 6672, Ap	677	26	56.5	271	11	US-11-096-568A-19009	Sequence 19009, A
604	26	56.5	47	9	US-10-467-657-6682	Sequence 6682, Ap	678	26	56.5	279	11	US-11-087-099-4795	Sequence 4795, Ap
605	26	56.5	50	9	US-10-467-657-6698	Sequence 6698, Ap	678	26	56.5	279	11	US-11-087-099-4795	Sequence 4795, Ap

679	26	56.5	284	11	US-11-096-568A-19686	Sequence 19686, A	752	26	56.5	440	9	US-10-194-447-34	Sequence 34, Appl
680	26	56.5	285	11	US-11-087-099-10484	Sequence 10484, A	753	26	56.5	440	9	US-10-195-883-34	Sequence 34, Appl
681	26	56.5	285	11	US-11-096-568A-31749	Sequence 31749, A	754	26	56.5	440	9	US-10-195-888-34	Sequence 34, Appl
682	26	56.5	289	11	US-11-087-099-9566	Sequence 9566, Ap	755	26	56.5	440	9	US-10-195-889-34	Sequence 34, Appl
683	26	56.5	289	11	US-11-188-298-15946	Sequence 15946, A	756	26	56.5	441	8	US-11-096-568A-31621	Sequence 31621, A
684	26	56.5	292	11	US-11-079-463-6393	Sequence 6393, Ap	757	26	56.5	441	11	US-10-511-937-2427	Sequence 2427, Ap
685	26	56.5	293	9	US-10-967-671-14	Sequence 14, Appl	758	26	56.5	442	11	US-11-172-740-459	Sequence 459, App
686	26	56.5	297	11	US-11-183-261-45	Sequence 45, Appl	759	26	56.5	442	11	US-11-172-740-456	Sequence 456, App
687	26	56.5	301	11	US-11-072-512-2223	Sequence 2223, Ap	760	26	56.5	444	11	US-11-172-740-457	Sequence 457, App
688	26	56.5	302	11	US-11-045-004-1615	Sequence 1615, Ap	761	26	56.5	444	11	US-11-172-740-461	Sequence 461, App
689	26	56.5	303	11	US-11-264-096-1631	Sequence 1631, Ap	762	26	56.5	444	11	US-11-172-740-716	Sequence 716, App
690	26	56.5	307	11	US-11-188-298-9397	Sequence 9397, Ap	763	26	56.5	445	11	US-11-172-740-458	Sequence 458, App
691	26	56.5	308	11	US-11-098-686-10548	Sequence 10548, A	764	26	56.5	445	11	US-11-172-740-460	Sequence 460, App
692	26	56.5	317	11	US-11-188-298-20023	Sequence 20023, A	765	26	56.5	445	11	US-11-172-740-462	Sequence 462, App
693	26	56.5	320	11	US-11-087-099-9806	Sequence 9806, Ap	766	26	56.5	445	11	US-11-172-740-464	Sequence 464, App
694	26	56.5	320	11	US-11-188-298-5986	Sequence 5986, Ap	767	26	56.5	445	11	US-11-172-740-465	Sequence 465, App
695	26	56.5	321	11	US-11-096-568A-19685	Sequence 19685, A	768	26	56.5	445	11	US-11-172-740-467	Sequence 467, App
696	26	56.5	323	11	US-11-188-298-15128	Sequence 15128, A	769	26	56.5	445	11	US-11-172-740-469	Sequence 469, App
697	26	56.5	324	11	US-11-096-568A-18484	Sequence 18484, A	770	26	56.5	445	11	US-11-172-740-708	Sequence 708, App
698	26	56.5	328	11	US-11-096-568A-18588	Sequence 18588, A	771	26	56.5	445	11	US-11-172-740-709	Sequence 709, App
699	26	56.5	333	11	US-11-188-298-2233	Sequence 2233, Ap	772	26	56.5	445	11	US-11-172-740-711	Sequence 711, App
700	26	56.5	333	11	US-11-188-298-19643	Sequence 19643, A	773	26	56.5	445	11	US-11-172-740-714	Sequence 714, App
701	26	56.5	334	11	US-11-165-211-53	Sequence 53, Appl	774	26	56.5	445	11	US-11-172-740-715	Sequence 715, App
702	26	56.5	334	11	US-11-165-226-63	Sequence 63, Appl	775	26	56.5	447	11	US-11-172-740-463	Sequence 10370, A
703	26	56.5	335	11	US-11-188-298-1623	Sequence 1623, Ap	776	26	56.5	447	11	US-11-172-740-466	Sequence 463, App
704	26	56.5	335	11	US-11-188-298-17211	Sequence 17211, A	777	26	56.5	447	11	US-11-172-740-466	Sequence 466, App
705	26	56.5	335	11	US-11-188-298-18290	Sequence 18290, A	778	26	56.5	447	11	US-11-172-740-468	Sequence 468, App
706	26	56.5	335	11	US-11-188-298-20285	Sequence 20285, A	779	26	56.5	447	11	US-11-172-740-470	Sequence 470, App
707	26	56.5	336	11	US-11-188-298-2907	Sequence 2907, Ap	780	26	56.5	447	11	US-11-172-740-712	Sequence 712, App
708	26	56.5	336	11	US-11-188-298-4654	Sequence 4654, Ap	781	26	56.5	447	11	US-11-172-740-713	Sequence 713, App
709	26	56.5	337	11	US-11-172-740-432	Sequence 432, App	782	26	56.5	448	9	US-10-763-712A-69	Sequence 69, Appl
710	26	56.5	337	11	US-11-188-298-5688	Sequence 5688, Ap	783	26	56.5	448	9	US-10-763-712A-112	Sequence 112, App
711	26	56.5	338	11	US-11-045-004-824	Sequence 824, App	784	26	56.5	448	11	US-11-096-568A-31620	Sequence 31620, A
712	26	56.5	341	11	US-11-188-298-2695	Sequence 2695, Ap	785	26	56.5	462	11	US-11-087-099-12038	Sequence 12028, A
713	26	56.5	342	11	US-11-188-298-4673	Sequence 4673, Ap	786	26	56.5	462	11	US-11-188-298-22172	Sequence 22172, A
714	26	56.5	343	8	US-10-505-928-379	Sequence 379, App	787	26	56.5	463	9	US-10-755-092-25	Sequence 25, Appl
715	26	56.5	344	11	US-11-188-298-19120	Sequence 19120, A	788	26	56.5	463	11	US-11-188-298-12080	Sequence 12080, A
716	26	56.5	347	11	US-11-188-298-20363	Sequence 20363, A	789	26	56.5	465	11	US-11-082-189-2834	Sequence 284, App
717	26	56.5	349	11	US-11-188-298-13346	Sequence 13346, A	790	26	56.5	466	11	US-11-096-568A-18731	Sequence 18731, A
718	26	56.5	350	9	US-10-506-454-1377	Sequence 1377, Ap	791	26	56.5	466	11	US-11-188-298-14364	Sequence 14364, A
719	26	56.5	354	11	US-11-188-298-7750	Sequence 7750, Ap	792	26	56.5	467	11	US-11-096-568A-18730	Sequence 18730, A
720	26	56.5	354	11	US-11-188-298-12547	Sequence 12547, A	793	26	56.5	468	11	US-11-096-568A-18730	Sequence 18730, A
721	26	56.5	358	11	US-11-188-298-6635	Sequence 6635, Ap	794	26	56.5	475	11	US-11-096-568A-31619	Sequence 31619, A
722	26	56.5	358	11	US-11-188-298-9724	Sequence 9724, Ap	795	26	56.5	476	11	US-11-096-568A-10368	Sequence 10368, A
723	26	56.5	358	11	US-11-188-298-15700	Sequence 15700, A	796	26	56.5	477	9	US-10-931-626-37	Sequence 37, Appl
724	26	56.5	358	11	US-11-188-298-17577	Sequence 17577, A	797	26	56.5	478	11	US-11-096-568A-81729	Sequence 81729, A
725	26	56.5	360	11	US-11-082-389-90	Sequence 90, Appl	798	26	56.5	484	11	US-11-096-568A-22865	Sequence 22865, A
726	26	56.5	360	11	US-11-082-389-92	Sequence 92, Appl	799	26	56.5	484	11	US-11-188-298-16281	Sequence 16281, A
727	26	56.5	360	11	US-11-096-568A-31748	Sequence 31748, A	800	26	56.5	485	11	US-11-188-298-8759	Sequence 8759, Ap
728	26	56.5	361	11	US-11-188-298-16030	Sequence 16030, A	801	26	56.5	485	11	US-11-188-298-8759	Sequence 8759, Ap
729	26	56.5	362	9	US-10-517-939-88	Sequence 88, Appl	802	26	56.5	494	11	US-11-188-298-573	Sequence 573, App
730	26	56.5	362	11	US-11-096-568A-19008	Sequence 19008, A	803	26	56.5	494	11	US-11-188-298-1897	Sequence 1897, App
731	26	56.5	364	11	US-11-087-099-7580	Sequence 7580, Ap	804	26	56.5	494	11	US-11-188-298-2973	Sequence 2973, App
732	26	56.5	364	11	US-11-096-568A-33295	Sequence 33295, A	805	26	56.5	497	11	US-11-072-512-3773	Sequence 3773, Ap
733	26	56.5	365	11	US-11-096-568A-33294	Sequence 33294, A	806	26	56.5	499	11	US-11-087-099-6998	Sequence 6998, Ap
734	26	56.5	366	11	US-11-188-298-11252	Sequence 11252, A	807	26	56.5	499	11	US-11-188-298-17444	Sequence 17444, A
735	26	56.5	369	11	US-11-096-568A-17906	Sequence 17906, A	808	26	56.5	516	9	US-10-506-448A-2	Sequence 2, Appl
736	26	56.5	371	11	US-11-188-298-13028	Sequence 13028, A	809	26	56.5	516	11	US-11-087-099-1845	Sequence 1845, Ap
737	26	56.5	376	9	US-10-201-525-7	Sequence 7, Appl	810	26	56.5	524	9	US-10-995-561-789	Sequence 789, App
738	26	56.5	377	11	US-10-201-525-5	Sequence 5, Appl	811	26	56.5	527	9	US-10-507-720-28	Sequence 28, Appl
739	26	56.5	377	11	US-11-121-731A-3	Sequence 3, Appl	812	26	56.5	529	11	US-11-079-463-9534	Sequence 9534, Ap
740	26	56.5	380	9	US-10-201-525-9	Sequence 9, Appl	813	26	56.5	536	10	US-11-183-118-24	Sequence 24, Appl
741	26	56.5	382	11	US-11-120-308-66	Sequence 66, Appl	814	26	56.5	536	11	US-11-183-118-24	Sequence 24, Appl
742	26	56.5	387	9	US-10-714-887-278	Sequence 278, App	815	26	56.5	540	11	US-11-099-691-2	Sequence 2, Appl
743	26	56.5	387	11	US-11-096-568A-33293	Sequence 33293, A	816	26	56.5	547	8	US-10-511-937-7965	Sequence 7965, Ap
744	26	56.5	403	11	US-11-045-004-2681	Sequence 2681, Ap	817	26	56.5	547	9	US-10-995-561-789	Sequence 789, App
745	26	56.5	409	9	US-10-878-556A-55	Sequence 55, Appl	818	26	56.5	547	9	US-10-995-561-787	Sequence 787, App
746	26	56.5	410	11	US-11-188-298-9180	Sequence 9180, Ap	819	26	56.5	547	9	US-10-493-909-65	Sequence 65, Appl
747	26	56.5	410	11	US-11-188-298-11564	Sequence 11564, A	820	26	56.5	547	9	US-10-501-841-114	Sequence 114, Appl
748	26	56.5	412	11	US-11-096-568A-7800	Sequence 7800, Ap	821	26	56.5	547	11	US-11-107-028-24	Sequence 24, Appl
749	26	56.5	412	11	US-11-188-298-16672	Sequence 16672, A	822	26	56.5	551	11	US-11-007-463-346	Sequence 346, App
750	26	56.5	417	11	US-11-188-298-19612	Sequence 19612, A	823	26	56.5	551	11	US-11-098-686-10806	Sequence 10806, A
751	26	56.5	428	11	US-11-087-099-12341	Sequence 12341, A	824	26	56.5	552	9	US-10-131-826A-332	Sequence 332, App

825	26	56.5	552	9	US-10-973-1158-332	Sequence 332, App	898	26	56.5	1744	11	US-11-182-016-22	Sequence 22, App1
826	26	56.5	552	9	US-10-137-873A-332	Sequence 332, App	899	26	56.5	1809	8	US-10-370-959-67	Sequence 67, App1
827	26	56.5	552	9	US-10-152-370-332	Sequence 332, App	900	26	56.5	1855	11	US-11-096-568A-31249	Sequence 31249, A
828	26	56.5	552	11	US-11-290-153-332	Sequence 332, App	901	26	56.5	1885	11	US-11-096-568A-31248	Sequence 31248, A
829	26	56.5	556	11	US-11-096-568A-35960	Sequence 25960, A	902	26	56.5	1938	9	US-10-995-561-661	Sequence 661, App
830	26	56.5	561	11	US-11-072-512-1590	Sequence 1990, App	903	26	56.5	1938	9	US-10-995-561-662	Sequence 662, App
831	26	56.5	565	11	US-11-087-099-6955	Sequence 6955, App	904	26	56.5	1954	9	US-10-995-561-660	Sequence 660, App
832	26	56.5	566	9	US-10-467-657-4020	Sequence 4020, App	905	26	56.5	1960	9	US-10-530-171-17	Sequence 17, App1
833	26	56.5	567	11	US-11-096-568A-29411	Sequence 29411, A	906	26	56.5	1960	11	US-11-069-834-48	Sequence 48, App1
834	26	56.5	571	11	US-11-188-298-20583	Sequence 20583, A	907	26	56.5	1960	11	US-11-069-834-50	Sequence 50, App1
835	26	56.5	574	11	US-11-079-463-6190	Sequence 6190, App	908	26	56.5	1963	9	US-10-877-346-43	Sequence 43, App1
836	26	56.5	578	11	US-11-096-568A-25959	Sequence 25959, App	909	26	56.5	1972	9	US-10-995-561-664	Sequence 664, App
837	26	56.5	580	11	US-11-096-568A-18064	Sequence 18064, A	910	26	56.5	1972	9	US-10-995-561-666	Sequence 666, App
838	26	56.5	582	11	US-11-205-225-10	Sequence 10, App1	911	26	56.5	1976	11	US-11-069-834-54	Sequence 54, App1
839	26	56.5	582	11	US-11-096-568A-18424	Sequence 18424, A	912	26	56.5	1992	11	US-11-069-834-58	Sequence 58, App1
840	26	56.5	589	11	US-11-096-568A-11656	Sequence 11656, A	913	26	56.5	1992	11	US-11-096-834-60	Sequence 60, App1
841	26	56.5	591	11	US-11-096-568A-31982	Sequence 31982, A	914	26	56.5	1995	11	US-11-069-834-56	Sequence 56, App1
842	26	56.5	592	11	US-11-188-298-422	Sequence 422, App	915	26	56.5	2000	11	US-11-069-834-56	Sequence 56, App1
843	26	56.5	593	11	US-11-188-298-11982	Sequence 11982, App	916	26	56.5	2004	9	US-10-467-657-84	Sequence 84, App1
844	26	56.5	593	11	US-11-188-298-14123	Sequence 14123, A	917	26	56.5	2004	9	US-10-467-657-6322	Sequence 6322, App
845	26	56.5	593	11	US-11-188-298-18740	Sequence 18740, A	918	26	56.5	2295	11	US-11-087-099-43450	Sequence 5450, App
846	26	56.5	594	11	US-11-188-298-18849	Sequence 18849, A	919	26	56.5	3353	11	US-10-995-561-776	Sequence 776, App
847	26	56.5	595	11	US-11-188-298-18101	Sequence 18101, A	920	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
848	26	56.5	595	11	US-11-188-298-20667	Sequence 20667, A	921	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
849	26	56.5	598	11	US-11-082-389-398	Sequence 398, App1	922	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
850	26	56.5	607	11	US-11-096-568A-31981	Sequence 31981, A	923	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
851	26	56.5	612	9	US-10-518-018-1	Sequence 1, App1	924	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
852	26	56.5	615	11	US-11-188-298-5550	Sequence 5550, App	925	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
853	26	56.5	622	11	US-11-045-004-780	Sequence 780, App	926	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
854	26	56.5	631	9	US-10-813-646-22	Sequence 22, App1	927	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
855	26	56.5	643	11	US-11-079-463-8343	Sequence 8343, App	928	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
856	26	56.5	650	11	US-11-188-298-459	Sequence 459, App	929	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
857	26	56.5	659	11	US-11-079-463-9258	Sequence 9258, App	930	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
858	26	56.5	667	9	US-10-055-877-203	Sequence 203, App	931	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
859	26	56.5	666	11	US-11-087-099-11029	Sequence 11029, A	932	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
860	26	56.5	721	11	US-11-262-356-12	Sequence 12, App1	933	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
861	26	56.5	737	11	US-11-152-366-28	Sequence 28, App1	934	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
862	26	56.5	737	11	US-11-072-512-2689	Sequence 2689, App	935	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
863	26	56.5	747	11	US-11-188-298-17849	Sequence 17849, A	936	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
864	26	56.5	753	8	US-10-509-131-25	Sequence 25, App1	937	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
865	26	56.5	783	11	US-11-186-284-59	Sequence 59, App1	938	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
866	26	56.5	784	8	US-11-122-396-25	Sequence 25, App1	939	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
867	26	56.5	788	8	US-10-485-346-2	Sequence 2, App1	940	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
868	26	56.5	797	11	US-11-087-099-11959	Sequence 11959, A	941	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
869	26	56.5	797	11	US-11-188-298-22120	Sequence 22120, A	942	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
870	26	56.5	801	11	US-11-079-463-8794	Sequence 8794, App	943	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
871	26	56.5	828	11	US-11-096-568A-29410	Sequence 29410, A	944	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
872	26	56.5	839	11	US-11-188-298-9565	Sequence 9565, App	945	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
873	26	56.5	841	9	US-10-770-726-88	Sequence 88, App1	946	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
874	26	56.5	852	9	US-10-467-657-5004	Sequence 5004, App	947	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
875	26	56.5	857	8	US-10-995-928-272	Sequence 272, App	948	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
876	26	56.5	857	11	US-11-090-617-686	Sequence 686, App	949	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
877	26	56.5	857	11	US-11-087-099-6692	Sequence 6692, App	950	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
878	26	56.5	884	11	US-11-096-568A-29409	Sequence 29409, A	951	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
879	26	56.5	904	11	US-11-188-298-4789	Sequence 4789, App	952	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
880	26	56.5	913	11	US-11-087-099-6734	Sequence 6734, App	953	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
881	26	56.5	1144	11	US-11-087-099-2278	Sequence 2278, App	954	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
882	26	56.5	1164	11	US-11-087-099-9070	Sequence 9070, App	955	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
883	26	56.5	1192	11	US-11-096-568A-31267	Sequence 31267, A	956	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
884	26	56.5	1211	11	US-11-188-298-10688	Sequence 10688, A	957	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
885	26	56.5	1217	11	US-11-072-512-2263	Sequence 2263, App	958	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
886	26	56.5	1266	9	US-10-995-561-665	Sequence 665, App	959	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
887	26	56.5	1394	11	US-11-115-639-52	Sequence 52, App1	960	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
888	26	56.5	1394	11	US-11-115-639-52	Sequence 52, App1	961	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
889	26	56.5	1394	11	US-11-115-639-54	Sequence 54, App1	962	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
890	26	56.5	1425	11	US-11-115-639-55	Sequence 55, App1	963	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
891	26	56.5	1429	8	US-10-511-937-2621	Sequence 367, App	964	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
892	26	56.5	1429	8	US-10-511-937-2621	Sequence 2621, App	965	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
893	26	56.5	1429	8	US-10-511-937-2621	Sequence 2621, App	966	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
894	26	56.5	1441	11	US-11-096-568A-34298	Sequence 2924, App	967	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
895	26	56.5	1450	11	US-11-096-568A-34297	Sequence 34297, A	968	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
896	26	56.5	1488	11	US-11-096-568A-34296	Sequence 34296, A	969	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App
897	26	56.5	1652	9	US-10-995-561-663	Sequence 663, App	970	26	56.5	5935	9	US-10-995-561-776	Sequence 776, App

```
971 25 54.3 223 11 US-11-096-568A-29131 Sequence 29131, A
972 25 54.3 225 11 US-11-096-568A-29111 Sequence 29111, A
973 25 54.3 226 11 US-11-096-568A-15712 Sequence 15712, A
974 25 54.3 229 11 US-11-096-568A-15711 Sequence 15711, A
975 25 54.3 235 11 US-11-096-568A-26549 Sequence 26549, A
976 25 54.3 237 9 US-10-510-386-34 Sequence 34, Appl
977 25 54.3 237 11 US-11-096-568A-11978 Sequence 11978, A
978 25 54.3 249 9 US-10-909-957-2 Sequence 2, Appl1
979 25 54.3 250 11 US-11-188-298-14833 Sequence 14833, A
980 25 54.3 251 11 US-11-096-568A-11977 Sequence 11977, A
981 25 54.3 253 11 US-11-096-568A-12345 Sequence 32345, A
982 25 54.3 255 11 US-11-179-977-3 Sequence 3, Appl1
983 25 54.3 257 11 US-11-087-099-3858 Sequence 3858, Ap
984 25 54.3 261 11 US-11-096-568A-7079 Sequence 7079, Ap
985 25 54.3 262 11 US-11-172-740-1774 Sequence 1774, Ap
986 25 54.3 265 9 US-10-793-626-1976 Sequence 1976, Ap
987 25 54.3 267 11 US-11-188-298-18331 Sequence 18331, A
988 25 54.3 269 11 US-11-096-568A-29824 Sequence 29824, A
989 25 54.3 269 11 US-11-188-298-11965 Sequence 11965, A
990 25 54.3 271 11 US-11-079-463-5305 Sequence 5305, Ap
991 25 54.3 275 9 US-10-821-234-1013 Sequence 1013, Ap
992 25 54.3 275 11 US-11-055-822-2 Sequence 2, Appl1
993 25 54.3 275 11 US-11-239-674-8 Sequence 8, Appl1
994 25 54.3 277 11 US-11-096-568A-240 Sequence 240, App
995 25 54.3 283 11 US-11-096-568A-11537 Sequence 11537, A
996 25 54.3 284 11 US-11-096-568A-239 Sequence 239, App
997 25 54.3 285 11 US-11-051-720-1493 Sequence 1493, Ap
998 25 54.3 287 11 US-11-080-991-66 Sequence 66, Appl
999 25 54.3 289 9 US-10-467-657-7802 Sequence 7802, Ap
1000 25 54.3 289 11 US-11-194-246-291 Sequence 291, App
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-1711
; Sequence 1711, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: Patencin version 3.3
; SEQ ID NO 1711
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1711
```

```
Query Match 100.0%; Score 46; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 MDDLOPETT 9
Db 4 MDDLOPETT 12
```

```
RESULT 2
US-10-530-061-1749
; Sequence 1749, Application US/10530061
```

```
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: Patencin version 3.3
; SEQ ID NO 1749
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1749
```

```
Query Match 100.0%; Score 46; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 MDDLOPETT 9
Db 1 MDDLOPETT 9
```

```
RESULT 3
US-10-511-814-8
; Sequence 8, Application US/10511814
; Publication No. US2006008472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, IIT, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT APPLICATION NUMBER: US/10/511,814
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
; OTHER INFORMATION: Synthetic Construct
US-10-511-814-8
```

```
Query Match 100.0%; Score 46; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.037;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 MDDLOPETT 9
Db 12 MDDLOPETT 20
```

```
RESULT 4
US-10-511-814-11
; Sequence 11, Application US/10511814
; Publication No. US2006008472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
```

APPLICANT: Westbrock, III, Thomas F.
TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
FILE REFERENCE: 21108.0016U2
CURRENT APPLICATION NUMBER: US/10/511,814
CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US03/12667
PRIOR FILING DATE: 2003-04-21
PRIOR APPLICATION NUMBER: 60/374,245
PRIOR FILING DATE: 2002-04-19
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PaacSeq for Windows Version 4.0
SEQ ID NO 11
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note =
OTHER INFORMATION: Synthetic Construct
US-10-511-814-11

Query Match 100.0%; Score 46; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.037;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 12 MLDLOPETT 20

RESULT 5
US-10-530-253-14
Sequence 14, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 14
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-14

Query Match 100.0%; Score 46; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.037;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 12 MLDLOPETT 20

RESULT 6
US-11-179-478-4
Sequence 4, Application US/11179478
Publication No. US20050249745A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28

CORRESPONDENCE ADDRESS:

ADDRESSER: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington

STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/179,478
FILING DATE: 13-JULY-2005

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298

REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300

TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: protein

US-11-179-478-4

Query Match 100.0%; Score 46; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.037;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
|||
Db 12 MLDLOPETT 20

RESULT 7
US-10-530-253-1
Sequence 1, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-1

Query Match 100.0%; Score 46; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDLQPERT 9
| | | | |
Db 162 MIDLQPERT 170

RESULT 8
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casseati, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 46; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDLQPERT 9
| | | | |
Db 162 MIDLQPERT 170

RESULT 9
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casseati, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match 100.0%; Score 46; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDLQPERT 9
| | | | |
Db 162 MIDLQPERT 170

RESULT 10
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casseati, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7

Query Match 100.0%; Score 46; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDLQPERT 9
| | | | |
Db 12 MIDLQPERT 20

RESULT 11
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casseati, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9

Query Match 100.0%; Score 46; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MIDLQPERT 9
| | | | |
Db 12 MIDLQPERT 20

RESULT 12
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:

```

; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhiney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11

Query Match          100.0%; Score 46; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 12 MLDLOPETT 20

RESULT 13
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANG, XIAOMU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
; CURRENT APPLICATION NUMBER: US/11/192,923A
; PRIOR FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match          100.0%; Score 46; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 12 MLDLOPETT 20

RESULT 14
US-10-530-061-1731
; Sequence 1731, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
```

```

; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1731
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1731

Query Match          91.3%; Score 42; DB 9; Length 15;
Best Local Similarity 88.9%; Pred. No. 0.027;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 4 ILDLQPETT 12

RESULT 15
US-10-530-253-34
; Sequence 34, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhiney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 34
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus type 52
US-10-530-253-34

Query Match          91.3%; Score 42; DB 9; Length 99;
Best Local Similarity 88.9%; Pred. No. 0.23;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
Db 12 ILDLQPETT 20

RESULT 16
US-10-530-061-1720
; Sequence 1720, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
```

;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 1720
;; LENGTH: 15
;; TYPE: PRT
;; ORGANISM: Human papillomavirus
US-10-530-061-1720

Query Match 80.4%; Score 37; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 0.26;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 :|||||
DB 4 VLDLQPEAT 12

RESULT 17
US-10-530-253-28
; Sequence 28, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 31
US-10-530-253-28

Query Match 80.4%; Score 37; DB 9; Length 98;
Best Local Similarity 77.8%; Pred. No. 2.1;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 :|||||
DB 12 VLDLQPEAT 20

RESULT 18
US-10-467-657-5266
; Sequence 5266, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SPA
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIANTINI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqMin99, version 1.04
; SEQ ID NO 5266
; LENGTH: 395

;; TYPE: PRT
;; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-5266

Query Match 76.1%; Score 35; DB 9; Length 395;
Best Local Similarity 75.0%; Pred. No. 25;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPETT 8
 :|||||
DB 364 MLDLQPEES 371

RESULT 19
US-10-530-253-30
; Sequence 30, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus type 35
US-10-530-253-30

Query Match 73.9%; Score 34; DB 9; Length 99;
Best Local Similarity 66.7%; Pred. No. 8.4;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
 :|||||
DB 12 VLDLQPEAT 20

RESULT 20
US-11-188-298-3960
; Sequence 3960, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 3960
; LENGTH: 324
; TYPE: PRT
; ORGANISM: Neisseria meningitidis MC58
US-11-188-298-3960

Query Match 73.9%; Score 34; DB 11; Length 324;
Best Local Similarity 85.7%; Pred. No. 32;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPE 7
 :|||||
DB 293 MLDLOPE 299

```
RESULT 21
US-11-055-822-68
; Sequence 68, Application US/11055822
; Publication No. US20050260707A1
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kroege, Burkhard
; APPLICANT: Schroder, Hartwig
; APPLICANT: Zeidler, Oskar
; APPLICANT: Habehauer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING
; FILE REFERENCE: BGI-121CPN
; CURRENT APPLICATION NUMBER: US/11/055,822
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 09/606,740
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: 60/141,031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: 60/142,101
; PRIOR FILING DATE: 1999-07-02
; PRIOR APPLICATION NUMBER: 60/148,613
; PRIOR FILING DATE: 1999-08-12
; PRIOR APPLICATION NUMBER: 60/187,970
; PRIOR FILING DATE: 2000-03-09
; PRIOR APPLICATION NUMBER: DE 19930476,9
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19931415,2
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931418,7
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931419,5
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931420,9
; PRIOR FILING DATE: 1999-07-08
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1158
; SEQ ID NO 68
; LENGTH: 468
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-11-055-822-68

Query Match      73.9%; Score 34; DB 11; Length 468;
Best Local Similarity 66.7%; Pred. No. 48;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      1 MLDQPERT 9
Db      345 VIDQPERT 353

RESULT 22
US-11-239-674-66
; Sequence 66, Application US/11239674
; Publication No. US20060084152A1
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kroege, Burkhard
; APPLICANT: Schroder, Hartwig
; APPLICANT: Zeidler, Oskar
; APPLICANT: Habehauer, Gregor
; APPLICANT: Kim, Jun-Won
; APPLICANT: Lee, Heung-Schick
; APPLICANT: Hwang, Byung-Joon
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING
; FILE REFERENCE: BGI-121CP2
; CURRENT APPLICATION NUMBER: US/11/239,674
; CURRENT FILING DATE: 2005-09-28
; PRIOR APPLICATION NUMBER: US/09/746,660
```

```
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 09/606740
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: 09/603124
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: 60/141031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: 60/142101
; PRIOR FILING DATE: 1999-07-02
; PRIOR APPLICATION NUMBER: 60/148613
; PRIOR FILING DATE: 1999-08-12
; PRIOR APPLICATION NUMBER: 60/187970
; PRIOR FILING DATE: 2000-03-09
; PRIOR APPLICATION NUMBER: DE 19931420,9
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 125
; SOFTWARE: Patentin Vera. 2.0
; SEQ ID NO 66
; LENGTH: 468
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-11-239-674-66

Query Match      73.9%; Score 34; DB 11; Length 468;
Best Local Similarity 66.7%; Pred. No. 48;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      1 MLDQPERT 9
Db      345 VIDQPERT 353

RESULT 23
US-11-087-099-4252
; Sequence 4252, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 4252
; LENGTH: 510
; TYPE: PRT
; ORGANISM: Nicotiana tabacum
US-11-087-099-4252

Query Match      73.9%; Score 34; DB 11; Length 510;
Best Local Similarity 66.7%; Pred. No. 53;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      1 MLDQPERT 9
Db      3 LLDQPERTS 11

RESULT 24
US-11-188-298-14373
; Sequence 14373, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 14373
; LENGTH: 510
```

```

; TYPE: PRT
; ORGANISM: Nicotiana tabacum
US-11-188-298-14373
Query Match
Best Local Similarity 73.9%; Score 34; DB 11; Length 510;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MLDLQPE 7
Db 3 LLDLQPE 11

RESULT 25
US-11-087-099-10725
; Sequence 10725, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 10725
; LENGTH: 646
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-087-099-10725
Query Match
Best Local Similarity 73.9%; Score 34; DB 11; Length 646;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPE 7
Db 66 MLDLQPE 72

RESULT 26
US-11-188-298-9913
; Sequence 9913, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 9913
; LENGTH: 646
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-188-298-9913
Query Match
Best Local Similarity 73.9%; Score 34; DB 11; Length 646;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPE 7
Db 66 MLDLQPE 72

RESULT 27
US-11-087-099-8952
; Sequence 8952, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
```

```

; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 8952
; LENGTH: 698
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-087-099-8952
Query Match
Best Local Similarity 73.9%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPE 7
Db 66 MLDLQPE 72

RESULT 28
US-11-087-099-9341
; Sequence 9341, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 9341
; LENGTH: 698
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-087-099-9341
Query Match
Best Local Similarity 73.9%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPE 7
Db 66 MLDLQPE 72

RESULT 29
US-11-188-298-8685
; Sequence 8685, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 8685
; LENGTH: 698
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-188-298-8685
Query Match
Best Local Similarity 73.9%; Score 34; DB 11; Length 698;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MLDLQPE 7
Db 66 MLDLQPE 72
```



```
RESULT 30
US-11-188-298-19289
; Sequence 19289, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22, 978
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 19289
; LENGTH: 698
; TYPE: PRT
; ORGANISM: Candida albicans
US-11-188-298-19289

Query Match          73.9%; Score 34; DB 11; Length 698;
Best Local Similarity 85.7%; Pred. No. 75;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 MDLQPE 7
Db      66 MDLQPE 72

RESULT 31
US-10-242-586-94
; Sequence 94, Application US/10242586
; Publication No. US20060073548A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Eaton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C21
; CURRENT APPLICATION NUMBER: US/10/242,586
; PRIOR FILING DATE: 2002-09-11
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
```

```
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-242-902-94

Query Match          71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MDLQPEPT 573

RESULT 32
US-10-242-902-94
; Sequence 94, Application US/10242902
; Publication No. US20060073549A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Eaton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C54
; CURRENT APPLICATION NUMBER: US/10/242,902
; PRIOR FILING DATE: 2002-09-13
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-242-902-94

Query Match          71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MDLQPEPT 573
```

```
RESULT 33
US-10-243-116-94
; Sequence 94, Application US/10243116
; Publication No. US20060073550A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Baton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C58
; CURRENT APPLICATION NUMBER: US/10/243,116
; CURRENT FILING DATE: 2002-09-13
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-116-94

Query Match          71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1 MDDLPETT 9
      |||||
Db      565 MDDLPETT 573

RESULT 34
US-10-243-136-94
; Sequence 94, Application US/10243136
; Publication No. US20060074228A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Baton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
```

```
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C32
; CURRENT APPLICATION NUMBER: US/10/243,136
; CURRENT FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-136-94

Query Match          71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1 MDDLPETT 9
      |||||
Db      565 MDDLPETT 573

RESULT 35
US-10-243-189-94
; Sequence 94, Application US/10243189
; Publication No. US20060074033A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Baton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C44
; CURRENT APPLICATION NUMBER: US/10/243,189
; CURRENT FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
```

```

; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-189-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MKDLLPEPT 573

RESULT 36
US-10-243-215-94
; Sequence 94, Application US/10243215
; Publication No. US20060073551A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Baton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630RIC27
; CURRENT APPLICATION NUMBER: US/10/243, 215
; PRIOR FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-215-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MKDLLPEPT 573
```

```

; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-215-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MKDLLPEPT 573

RESULT 37
US-10-243-236-94
; Sequence 94, Application US/10243236
; Publication No. US20060073552A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Baton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watanabe, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630RIC35
; CURRENT APPLICATION NUMBER: US/10/243, 236
; PRIOR FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-236-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MKDLLPEPT 573
```

Db 565 MKDLPEPT 573

RESULT 38

US-10-243-298-94

/ Sequence 94, Application US/10243298
/ Publication No. US20060073553A1
/ GENERAL INFORMATION:

/ APPLICANT: Baker, Kevin
/ APPLICANT: Baton, Dan
/ APPLICANT: Filvaroff, Ellen
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Grimaldi, J. Christopher
/ APPLICANT: Gurney, Auscia
/ APPLICANT: Smith, Victoria
/ APPLICANT: Stephan, Jean-Philippe
/ APPLICANT: Watande, Colin
/ APPLICANT: Wood, William
/ APPLICANT: Zhang, Zemin
/ APPLICANT: Fong, Sherman
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3630R1C49
/ CURRENT APPLICATION NUMBER: US/10/243,298
/ CURRENT FILING DATE: 2002-09-13
/ PRIOR APPLICATION NUMBER: 10/197942
/ PRIOR FILING DATE: 2002-07-18
/ PRIOR APPLICATION NUMBER: 60/059114
/ PRIOR FILING DATE: 1997-09-17
/ PRIOR APPLICATION NUMBER: 60/063046
/ PRIOR FILING DATE: 1997-10-24
/ PRIOR APPLICATION NUMBER: 60/065027
/ PRIOR FILING DATE: 1997-11-10
/ PRIOR APPLICATION NUMBER: 60/079689
/ PRIOR FILING DATE: 1998-03-27
/ PRIOR APPLICATION NUMBER: 60/086478
/ PRIOR FILING DATE: 1998-05-22
/ PRIOR APPLICATION NUMBER: 60/087607
/ PRIOR FILING DATE: 1998-06-02
/ PRIOR APPLICATION NUMBER: 60/089801
/ PRIOR FILING DATE: 1998-06-18
/ PRIOR APPLICATION NUMBER: 60/090557
/ PRIOR FILING DATE: 1998-06-24
/ PRIOR APPLICATION NUMBER: 60/090689
/ PRIOR FILING DATE: 1998-06-25
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 116
/ SEQ ID NO 94
/ LENGTH: 847
/ TYPE: PRT
/ ORGANISM: Homo Sapien
US-10-243-298-94

Query Match 71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MDLPEPT 9

Db 565 MKDLPEPT 573

RESULT 39

US-10-243-304-94

/ Sequence 94, Application US/10243304
/ Publication No. US20060073554A1
/ GENERAL INFORMATION:

/ APPLICANT: Baker, Kevin
/ APPLICANT: Baton, Dan
/ APPLICANT: Filvaroff, Ellen
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Grimaldi, J. Christopher

/ APPLICANT: Gurney, Austin
/ APPLICANT: Smith, Victoria
/ APPLICANT: Stephan, Jean-Philippe
/ APPLICANT: Watande, Colin
/ APPLICANT: Wood, William
/ APPLICANT: Zhang, Zemin
/ APPLICANT: Fong, Sherman
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3630R1C42
/ CURRENT APPLICATION NUMBER: US/10/243,304
/ CURRENT FILING DATE: 2002-09-12
/ PRIOR APPLICATION NUMBER: 10/197942
/ PRIOR FILING DATE: 2002-07-18
/ PRIOR APPLICATION NUMBER: 60/059114
/ PRIOR FILING DATE: 1997-09-17
/ PRIOR APPLICATION NUMBER: 60/063046
/ PRIOR FILING DATE: 1997-10-24
/ PRIOR APPLICATION NUMBER: 60/065027
/ PRIOR FILING DATE: 1997-11-10
/ PRIOR APPLICATION NUMBER: 60/079689
/ PRIOR FILING DATE: 1998-03-27
/ PRIOR APPLICATION NUMBER: 60/086478
/ PRIOR FILING DATE: 1998-05-22
/ PRIOR APPLICATION NUMBER: 60/087607
/ PRIOR FILING DATE: 1998-06-02
/ PRIOR APPLICATION NUMBER: 60/089801
/ PRIOR FILING DATE: 1998-06-18
/ PRIOR APPLICATION NUMBER: 60/090557
/ PRIOR FILING DATE: 1998-06-24
/ PRIOR APPLICATION NUMBER: 60/090689
/ PRIOR FILING DATE: 1998-06-25
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 116
/ SEQ ID NO 94
/ LENGTH: 847
/ TYPE: PRT
/ ORGANISM: Homo Sapien
US-10-243-304-94

Query Match 71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MDLPEPT 9

Db 565 MKDLPEPT 573

RESULT 40

US-10-243-338-94

/ Sequence 94, Application US/10243338
/ Publication No. US20060073579A1
/ GENERAL INFORMATION:

/ APPLICANT: Baker, Kevin
/ APPLICANT: Baton, Dan
/ APPLICANT: Filvaroff, Ellen
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Grimaldi, J. Christopher
/ APPLICANT: Gurney, Auscia
/ APPLICANT: Smith, Victoria
/ APPLICANT: Stephan, Jean-Philippe
/ APPLICANT: Watande, Colin
/ APPLICANT: Wood, William
/ APPLICANT: Zhang, Zemin
/ APPLICANT: Fong, Sherman
/ TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
/ FILE REFERENCE: P3630R1C52
/ CURRENT APPLICATION NUMBER: US/10/243,338
/ CURRENT FILING DATE: 2002-09-13
/ PRIOR APPLICATION NUMBER: 10/197942
/ PRIOR FILING DATE: 2002-07-18

```

; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-338-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MDLQPEPT 573

RESULT 41
US-10-243-345-94
; Sequence 94, Application US/10243345
; Publication No. US20060073556A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Eaton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Guiney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watande, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C33
; CURRENT APPLICATION NUMBER: US/10/243.345
; PRIOR FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-357-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MDLQPEPT 573

RESULT 42
US-10-243-357-94
; Sequence 94, Application US/10243357
; Publication No. US20060073556A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Eaton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Guiney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watande, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C55
; CURRENT APPLICATION NUMBER: US/10/243.357
; PRIOR FILING DATE: 2002-09-13
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-357-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```

; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-345-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MDLQPEPT 573

RESULT 41
US-10-243-345-94
; Sequence 94, Application US/10243345
; Publication No. US20060073556A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Eaton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Guiney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watande, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C33
; CURRENT APPLICATION NUMBER: US/10/243.345
; PRIOR FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-357-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MDLQPEPT 9
Db      565 MDLQPEPT 573

RESULT 42
US-10-243-357-94
; Sequence 94, Application US/10243357
; Publication No. US20060073556A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
; APPLICANT: Eaton, Dan
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Guiney, Austin
; APPLICANT: Smith, Victoria
; APPLICANT: Stephan, Jean-Philippe
; APPLICANT: Watande, Colin
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; APPLICANT: Fong, Sherman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3630R1C55
; CURRENT APPLICATION NUMBER: US/10/243.357
; PRIOR FILING DATE: 2002-09-13
; PRIOR APPLICATION NUMBER: 10/197942
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/059114
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/063046
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/065027
; PRIOR FILING DATE: 1997-11-10
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/086478
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087607
; PRIOR FILING DATE: 1998-06-02
; PRIOR APPLICATION NUMBER: 60/089801
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/090557
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090689
; PRIOR FILING DATE: 1998-06-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 94
; LENGTH: 847
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-243-357-94

Query Match      71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 MLDLPETT 9
| | | | |
Db 565 MKDLPEPT 573

RESULT 43

US-10-245-083-94
; Sequence 94, Application US/10245083
; Publication No. US20060073557A1
; GENERAL INFORMATION:

APPLICANT: Baker, Kevin
APPLICANT: Eaton, Dan
APPLICANT: Filvaroff, Ellen
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe
APPLICANT: Matande, Colin
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
APPLICANT: Fong, Sherman
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3630R1C91
CURRENT APPLICATION NUMBER: US/10/245,083
CURRENT FILING DATE: 2002-09-16
PRIOR APPLICATION NUMBER: 10/197942
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/059114
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/063046
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/065027
PRIOR FILING DATE: 1997-11-10
PRIOR APPLICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/086478
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/087607
PRIOR FILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/089801
PRIOR FILING DATE: 1998-06-18
PRIOR APPLICATION NUMBER: 60/090557
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090689
PRIOR FILING DATE: 1998-06-25
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 116
SEQ ID NO 94
LENGTH: 847
TYPE: PRT
ORGANISM: Homo Sapien
US-10-245-083-94

Query Match 71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MLDLPETT 9
| | | | |
Db 565 MKDLPEPT 573

RESULT 44

US-10-247-015-94
; Sequence 94, Application US/10247015
; Publication No. US20060073558A1
; GENERAL INFORMATION:

APPLICANT: Baker, Kevin
APPLICANT: Eaton, Dan

APPLICANT: Filvaroff, Ellen
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin
APPLICANT: Smith, Victoria
APPLICANT: Stephan, Jean-Philippe
APPLICANT: Matande, Colin
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
APPLICANT: Fong, Sherman
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3630R1C118
CURRENT APPLICATION NUMBER: US/10/247,015
CURRENT FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 10/197942
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/059114
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/063046
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/065027
PRIOR FILING DATE: 1997-11-10
PRIOR APPLICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/086478
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/087607
PRIOR FILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/089801
PRIOR FILING DATE: 1998-06-18
PRIOR APPLICATION NUMBER: 60/090557
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090689
PRIOR FILING DATE: 1998-06-25
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 116
SEQ ID NO 94
LENGTH: 847
TYPE: PRT
ORGANISM: Homo Sapien
US-10-247-015-94

Query Match 71.7%; Score 33; DB 9; Length 847;
Best Local Similarity 77.8%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MLDLPETT 9
| | | | |
Db 565 MKDLPEPT 573

RESULT 45

US-11-087-099-11582
; Sequence 11582, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:

APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant Improvement
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
NUMBER OF SEQ ID NOS: 12464
SEQ ID NO 11582
LENGTH: 253
TYPE: PRT
ORGANISM: Arabidopsis thaliana
US-11-087-099-11582

Query Match 69.6%; Score 32; DB 11; Length 253;
Best Local Similarity 66.7%; Pred. No. 60;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 MLDLOPETT 9
:|||||:
Db 40 VLDLAPETS 48

RESULT 46

US-11-045-004-1264
; Sequence 1264, Application US/11045004
; Publication No. US20060078901A1
; GENERAL INFORMATION:
; APPLICANT: BUCHRIEGER, CARMEN
; APPLICANT: FRANGEUL, LIONEL
; APPLICANT: COUVE, ELISABETH
; APPLICANT: RUSNIOK, CHRISTOPHE
; APPLICANT: FSIHI, HAFIDA
; APPLICANT: DEHOUX, PIERRE
; APPLICANT: DUSURGOT, OLIVIER
; APPLICANT: CHETOUANI, FARID
; APPLICANT: NEDJARI, HAFED
; APPLICANT: GLASER, PHILIPPE
; APPLICANT: KUNST, FRANCK
; APPLICANT: COSSART, PASCALE
; APPLICANT: DANIELS, JUSTIN
; APPLICANT: GOEBEL, WERNER
; APPLICANT: KREFT, JURGEN
; APPLICANT: KUHN, MICHAEL
; APPLICANT: NG, EVA
; APPLICANT: VAZQUEZ-BOLAND, ANTONIO
; APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
; APPLICANT: GARRIDO-GARCIA, PATRICIA
; APPLICANT: TIERREZ-MARTINEZ, ALBERTO
; APPLICANT: AMEND, ALEXANDRA
; APPLICANT: CHAKRABORTY, TRINAD
; APPLICANT: DOMANN, EUGEN
; APPLICANT: HAIN, THORSTEN
; APPLICANT: BERCHE, PATRICK
; APPLICANT: CHARBIT, ALAIN
; APPLICANT: DURANT, LIONEL
; APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
; APPLICANT: BAQUERO, FERNANDO
; APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
; APPLICANT: GOMEZ-LOPEZ, NURIA
; APPLICANT: MADUENIO, ENCARNIA
; APPLICANT: PABLOS, BETRIZ DE
; APPLICANT: WEHLAND, JURGEN
; APPLICANT: KARST, UWE
; APPLICANT: ENTIAN, KARL-DIETER
; APPLICANT: HAUF, JORG
; APPLICANT: ROSE, MATTHIAS
; APPLICANT: VOSS, HANUT
; TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
; FILE REFERENCE: 05394.0018-02
; CURRENT APPLICATION NUMBER: US/11/045.004
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: 10/637,657
; PRIOR FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: 10/257,023
; PRIOR FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: PCT/FR01/01118
; PRIOR FILING DATE: 2001-04-11
; PRIOR APPLICATION NUMBER: FR 00/04,629
; PRIOR FILING DATE: 2000-04-11
; NUMBER OF SEQ ID NOS: 2854
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1264
; LENGTH: 276
; TYPE: PRT
; ORGANISM: Listeria monocytogenes
US-11-045-004-1264

Query Match 69.6%; Score 32; DB 11; Length 276;
Best Local Similarity 85.7%; Pred. No. 66;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLDLOPE 7
:|||||:
Db 47 MLDLKE 53

RESULT 47

US-11-045-004-391
; Sequence 391, Application US/11045004
; Publication No. US20060078901A1
; GENERAL INFORMATION:
; APPLICANT: BUCHRIEGER, CARMEN
; APPLICANT: FRANGEUL, LIONEL
; APPLICANT: COUVE, ELISABETH
; APPLICANT: RUSNIOK, CHRISTOPHE
; APPLICANT: FSIHI, HAFIDA
; APPLICANT: DEHOUX, PIERRE
; APPLICANT: DUSURGOT, OLIVIER
; APPLICANT: CHETOUANI, FARID
; APPLICANT: NEDJARI, HAFED
; APPLICANT: GLASER, PHILIPPE
; APPLICANT: KUNST, FRANCK
; APPLICANT: COSSART, PASCALE
; APPLICANT: DANIELS, JUSTIN
; APPLICANT: GOEBEL, WERNER
; APPLICANT: KREFT, JURGEN
; APPLICANT: KUHN, MICHAEL
; APPLICANT: NG, EVA
; APPLICANT: VAZQUEZ-BOLAND, ANTONIO
; APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
; APPLICANT: GARRIDO-GARCIA, PATRICIA
; APPLICANT: TIERREZ-MARTINEZ, ALBERTO
; APPLICANT: AMEND, ALEXANDRA
; APPLICANT: CHAKRABORTY, TRINAD
; APPLICANT: DOMANN, EUGEN
; APPLICANT: HAIN, THORSTEN
; APPLICANT: BERCHE, PATRICK
; APPLICANT: CHARBIT, ALAIN
; APPLICANT: DURANT, LIONEL
; APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
; APPLICANT: BAQUERO, FERNANDO
; APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
; APPLICANT: GOMEZ-LOPEZ, NURIA
; APPLICANT: MADUENIO, ENCARNIA
; APPLICANT: PABLOS, BETRIZ DE
; APPLICANT: WEHLAND, JURGEN
; APPLICANT: KARST, UWE
; APPLICANT: ENTIAN, KARL-DIETER
; APPLICANT: HAUF, JORG
; APPLICANT: ROSE, MATTHIAS
; APPLICANT: VOSS, HANUT
; TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
; FILE REFERENCE: 05394.0018-02
; CURRENT APPLICATION NUMBER: US/11/045.004
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: 10/637,657
; PRIOR FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: 10/257,023
; PRIOR FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: PCT/FR01/01118
; PRIOR FILING DATE: 2001-04-11
; PRIOR APPLICATION NUMBER: FR 00/04,629
; PRIOR FILING DATE: 2000-04-11
; NUMBER OF SEQ ID NOS: 2854
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 391
; LENGTH: 291
; TYPE: PRT
; ORGANISM: Listeria monocytogenes
US-11-045-004-391

Query Match 69.6%; Score 32; DB 11; Length 291;
Best Local Similarity 100.0%; Pred. No. 70;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3 MDLDPET 8
 |||||
Db 225 DLDPET 230

RESULT 48
US-10-493-909-77
; Sequence 77, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; APPLICANT: WYCOFF, KEITH L.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; PRIOR FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 77
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-493-909-77

Query Match 69.6%; Score 32; DB 9; Length 548;
Best Local Similarity 85.7%; Pred. No. 1.4e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLDPET 7
 |||||
Db 114 ILDPET 120

RESULT 49
US-10-493-909-78
; Sequence 78, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; APPLICANT: WYCOFF, KEITH L.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; PRIOR FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 78
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-493-909-78

Query Match 69.6%; Score 32; DB 9; Length 548;
Best Local Similarity 85.7%; Pred. No. 1.4e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDLDPET 7
 |||||
Db 114 ILDPET 120

RESULT 50
US-10-530-061-1745
; Sequence 1745, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 1745
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1745

Query Match 67.4%; Score 31; DB 9; Length 15;
Best Local Similarity 66.7%; Pred. No. 3.9;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MDLDPET 9
 |||||
Db 4 ILDPET 12

Search completed: May 5, 2006, 08:40:37
Job time : 10.4 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 03:13:35 ; Search time 21 Seconds
(without alignments)
35.432 Million cell updates/sec

Title: US-08-170-344-16

Perfect score: 48

Sequence: 1 RLCVQSTRV 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

1: Issued Patents AA.*
2: /cgn2_6/ptodata/1/iaa/5_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/H_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCRTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	48	100.0	9	2	US-09-574-749B-41
2	48	100.0	10	2	US-10-365-908-17
3	48	100.0	17	2	US-08-075-541D-48
4	48	100.0	19	2	US-08-075-541D-39
5	48	100.0	19	2	US-09-000-003A-8
6	48	100.0	19	2	US-09-405-986A-9
7	48	100.0	20	2	US-09-828-645-4
8	48	100.0	20	2	US-09-980-177A-74
9	48	100.0	21	1	US-08-934-915-49
10	48	100.0	21	1	US-08-934-915-156
11	48	100.0	25	2	US-08-075-541D-47
12	48	100.0	30	1	US-08-934-915-53
13	48	100.0	30	1	US-09-486-394-4
14	48	100.0	30	2	US-08-406-248-6
15	48	100.0	98	2	US-08-075-541D-42
16	48	100.0	98	2	US-09-382-616A-1
17	48	100.0	98	2	US-08-944-368A-4
18	48	100.0	98	2	US-09-820-764-4
19	48	100.0	98	2	US-09-613-303-8
20	48	100.0	98	2	US-09-566-420-19
21	48	100.0	98	2	US-09-986-118A-4
22	48	100.0	98	2	US-09-728-466-1
23	48	100.0	98	2	US-09-824-017-4
24	48	100.0	98	2	US-10-267-311-8
25	48	100.0	98	2	US-10-201-764-19
26	48	100.0	98	2	US-09-637-746-3
27	48	100.0	98	2	US-09-501-097A-7

28	48	100.0	98	2	US-09-980-523A-12	Sequence 12, Appl
29	48	100.0	121	2	US-09-613-303-12	Sequence 12, Appl
30	48	100.0	121	2	US-10-267-311-12	Sequence 12, Appl
31	48	100.0	172	2	US-08-860-165-14	Sequence 14, Appl
32	48	100.0	172	2	US-09-359-382-14	Sequence 14, Appl
33	48	100.0	185	2	US-09-462-993-2	Sequence 2, Appl1
34	48	100.0	198	2	US-09-613-303-35	Sequence 35, Appl
35	48	100.0	198	2	US-10-267-311-35	Sequence 35, Appl
36	48	100.0	220	2	US-09-485-885-1	Sequence 1, Appl1
37	48	100.0	220	2	US-09-485-885-8	Sequence 8, Appl1
38	48	100.0	229	2	US-09-485-885-12	Sequence 12, Appl
39	48	100.0	253	1	US-08-459-818-20	Sequence 20, Appl
40	48	100.0	253	1	US-08-889-666-20	Sequence 20, Appl
41	48	100.0	253	1	US-08-465-078-20	Sequence 20, Appl
42	48	100.0	253	1	US-08-725-776-20	Sequence 20, Appl
43	48	100.0	253	1	US-08-488-062-20	Sequence 20, Appl
44	48	100.0	263	1	US-08-117-083-9	Sequence 9, Appl1
45	48	100.0	266	2	US-08-860-165-10	Sequence 10, Appl
46	48	100.0	266	2	US-09-359-382-10	Sequence 10, Appl
47	48	100.0	266	2	US-09-167-309A-1	Sequence 1, Appl1
48	48	100.0	267	2	US-09-501-097A-25	Sequence 25, Appl
49	48	100.0	295	2	US-09-613-303-33	Sequence 33, Appl
50	48	100.0	295	2	US-10-267-311-33	Sequence 33, Appl
51	48	100.0	324	2	US-09-613-303-25	Sequence 25, Appl
52	48	100.0	324	2	US-10-267-311-25	Sequence 25, Appl
53	48	100.0	371	2	US-09-485-885-6	Sequence 6, Appl1
54	48	100.0	390	2	US-09-485-885-14	Sequence 14, Appl
55	48	100.0	420	2	US-09-501-097A-22	Sequence 22, Appl
56	48	100.0	493	2	US-09-613-303-19	Sequence 19, Appl
57	48	100.0	493	2	US-10-267-311-19	Sequence 19, Appl
58	48	100.0	639	2	US-09-613-303-17	Sequence 17, Appl
59	48	100.0	639	2	US-10-267-311-17	Sequence 17, Appl
60	48	100.0	641	2	US-09-613-303-51	Sequence 51, Appl
61	48	100.0	641	2	US-10-267-311-51	Sequence 51, Appl
62	48	100.0	647	2	US-09-613-303-53	Sequence 53, Appl
63	48	100.0	647	2	US-10-267-311-53	Sequence 53, Appl
64	48	100.0	648	2	US-09-613-303-29	Sequence 29, Appl
65	48	100.0	648	2	US-10-267-311-29	Sequence 29, Appl
66	48	100.0	711	2	US-09-613-303-41	Sequence 41, Appl
67	48	100.0	711	2	US-10-267-311-41	Sequence 41, Appl
68	48	100.0	723	2	US-09-501-097A-20	Sequence 20, Appl
69	48	100.0	724	2	US-09-613-303-45	Sequence 45, Appl
70	48	100.0	724	2	US-10-267-311-45	Sequence 45, Appl
71	44	91.7	9	2	US-10-365-908-14	Sequence 34, Appl
72	44	91.7	30	1	US-08-934-915-52	Sequence 52, Appl
73	43	89.6	20	2	US-09-980-177A-75	Sequence 75, Appl
74	40	83.3	30	1	US-08-934-915-71	Sequence 71, Appl
75	39	81.2	10	2	US-10-365-908-13	Sequence 13, Appl
76	37	77.1	20	2	US-09-828-645-8	Sequence 8, Appl1
77	36	75.0	19	2	US-08-075-541D-38	Sequence 38, Appl
78	35	72.9	222	2	US-09-252-991A-27972	Sequence 27972, A
79	34	70.8	117	2	US-08-487-761-17	Sequence 17, Appl
80	34	70.8	201	2	US-08-679-493A-190	Sequence 190, App
81	34	70.8	1121	2	US-09-252-991A-28551	Sequence 28551, A
82	33	68.8	31	2	US-08-525-559A-15	Sequence 15, Appl
83	33	68.8	30	4	PCT-US91-0242-8	Sequence 8, Appl1
84	33	68.8	50	4	PCT-US91-0242-9	Sequence 9, Appl1
85	33	68.8	100	2	US-09-840-459-27	Sequence 27, Appl
86	33	68.8	100	2	US-09-497-625A-27	Sequence 27, Appl
87	33	68.8	104	2	US-08-881-037-37	Sequence 37, Appl
88	33	68.8	108	2	US-09-513-999C-4205	Sequence 4205, Ap
89	33	68.8	112	1	US-08-606-293-4	Sequence 4, Appl1
90	33	68.8	112	1	US-08-606-293-8	Sequence 8, Appl1
91	33	68.8	112	2	US-09-518-737-4	Sequence 4, Appl1
92	33	68.8	113	2	US-09-233-290-4	Sequence 28, Appl
93	33	68.8	113	2	US-09-233-290-48	Sequence 28, Appl
94	33	68.8	114	1	US-07-947-245-9	Sequence 9, Appl1
95	33	68.8	114	1	US-09-027-449-45	Sequence 45, Appl
96	33	68.8	114	2	US-09-027-449-46	Sequence 46, Appl
97	33	68.8	114	2	US-08-804-444A-45	Sequence 45, Appl
98	33	68.8	114	2	US-08-804-444A-46	Sequence 46, Appl
99	33	68.8	114	2	US-09-026-985-45	Sequence 45, Appl
100	33	68.8	114	2	US-09-026-985-46	Sequence 46, Appl

101	33	68.8	114	2	US-09-121-952A-45	Sequence 45, Appl	174	33	68.8	242	2	US-09-026-985-42	Sequence 42, Appl
102	33	68.8	114	2	US-09-121-952A-46	Sequence 46, Appl	175	33	68.8	242	2	US-09-026-985-51	Sequence 51, Appl
103	33	68.8	114	2	US-09-234-340A-45	Sequence 45, Appl	176	33	68.8	242	2	US-09-026-985-56	Sequence 56, Appl
104	33	68.8	114	2	US-09-234-340A-46	Sequence 46, Appl	177	33	68.8	242	2	US-09-026-985-62	Sequence 62, Appl
105	33	68.8	114	2	US-09-914-695-18	Sequence 18, Appl	178	33	68.8	242	2	US-09-121-952A-42	Sequence 42, Appl
106	33	68.8	114	2	US-09-355-014-45	Sequence 45, Appl	179	33	68.8	242	2	US-09-121-952A-51	Sequence 51, Appl
107	33	68.8	114	2	US-09-355-014-46	Sequence 46, Appl	180	33	68.8	242	2	US-09-121-952A-56	Sequence 56, Appl
108	33	68.8	116	1	US-08-482-882-66	Sequence 66, Appl	181	33	68.8	242	2	US-09-121-952A-62	Sequence 62, Appl
109	33	68.8	116	1	US-08-483-389-66	Sequence 66, Appl	182	33	68.8	242	2	US-09-234-340A-42	Sequence 42, Appl
110	33	68.8	116	1	US-08-487-113D-66	Sequence 66, Appl	183	33	68.8	242	2	US-09-234-340A-56	Sequence 56, Appl
111	33	68.8	116	1	US-08-473-503-66	Sequence 66, Appl	184	33	68.8	242	2	US-09-234-340A-62	Sequence 62, Appl
112	33	68.8	116	1	US-08-483-932-66	Sequence 66, Appl	185	33	68.8	242	2	US-09-355-014-42	Sequence 42, Appl
113	33	68.8	116	2	US-08-720-420A-66	Sequence 66, Appl	186	33	68.8	242	2	US-09-355-014-51	Sequence 51, Appl
114	33	68.8	116	2	US-08-714-017-66	Sequence 66, Appl	187	33	68.8	242	2	US-09-355-014-56	Sequence 56, Appl
115	33	68.8	116	2	US-08-475-680-66	Sequence 66, Appl	188	33	68.8	242	2	US-09-355-014-62	Sequence 62, Appl
116	33	68.8	125	1	US-08-331-398A-63	Sequence 63, Appl	189	33	68.8	242	2	US-09-355-014-62	Sequence 62, Appl
117	33	68.8	125	1	US-08-331-397B-63	Sequence 63, Appl	190	33	68.8	242	6	5455030-17	Patent No. 5455030
118	33	68.8	125	1	US-08-759-804A-62	Sequence 62, Appl	191	33	68.8	250	1	US-08-392-338A-15	Sequence 15, Appl
119	33	68.8	127	1	US-08-482-882-45	Sequence 45, Appl	192	33	68.8	250	2	US-09-166-750-15	Sequence 15, Appl
120	33	68.8	127	1	US-08-483-389-45	Sequence 45, Appl	193	33	68.8	250	2	US-09-166-093-15	Sequence 15, Appl
121	33	68.8	127	1	US-08-487-113D-45	Sequence 45, Appl	194	33	68.8	250	2	US-09-172-019-15	Sequence 15, Appl
122	33	68.8	127	1	US-08-473-503-45	Sequence 45, Appl	195	33	68.8	250	2	US-09-166-094-15	Sequence 15, Appl
123	33	68.8	127	1	US-08-483-932-45	Sequence 45, Appl	196	33	68.8	250	2	US-09-443-213-15	Sequence 15, Appl
124	33	68.8	127	1	US-08-720-420A-45	Sequence 45, Appl	197	33	68.8	253	1	US-08-392-338A-17	Sequence 17, Appl
125	33	68.8	127	2	US-08-714-017-45	Sequence 45, Appl	198	33	68.8	253	2	US-09-166-750-17	Sequence 17, Appl
126	33	68.8	127	2	US-08-475-680-45	Sequence 45, Appl	199	33	68.8	253	2	US-09-166-093-17	Sequence 17, Appl
127	33	68.8	131	1	US-08-398-613A-48	Sequence 48, Appl	200	33	68.8	253	2	US-09-172-019-17	Sequence 17, Appl
128	33	68.8	131	1	US-08-398-612A-48	Sequence 48, Appl	201	33	68.8	253	2	US-09-166-094-17	Sequence 17, Appl
129	33	68.8	131	1	US-08-398-611A-48	Sequence 48, Appl	202	33	68.8	253	2	US-09-443-213-17	Sequence 17, Appl
130	33	68.8	131	1	US-08-491-334A-48	Sequence 48, Appl	203	33	68.8	267	2	US-09-419-788-30	Sequence 30, Appl
131	33	68.8	131	2	US-08-589-939-7	Sequence 7, Appl	204	33	68.8	269	2	US-09-358-321C-32	Sequence 32, Appl
132	33	68.8	131	2	US-09-027-449-35	Sequence 35, Appl	205	33	68.8	331	2	US-09-252-991A-29393	Sequence 29393, A
133	33	68.8	131	2	US-08-804-444A-35	Sequence 35, Appl	206	33	68.8	362	2	US-09-075-215A-18	Sequence 18, Appl
134	33	68.8	131	2	US-09-026-985-35	Sequence 35, Appl	207	33	68.8	378	2	US-09-949-016-10106	Sequence 10106, A
135	33	68.8	131	2	US-09-121-952A-35	Sequence 35, Appl	208	33	68.8	409	2	US-09-075-215A-17	Sequence 17, Appl
136	33	68.8	131	2	US-09-234-340A-35	Sequence 35, Appl	209	33	68.8	580	1	US-08-420-235B-15	Sequence 15, Appl
137	33	68.8	131	2	US-09-355-014-35	Sequence 35, Appl	210	33	68.8	580	2	US-08-793-62A-15	Sequence 15, Appl
138	33	68.8	173	4	PCT-US91-02942-3	Sequence 3, Appl	211	33	68.8	580	4	PCT-US95-10194-15	Sequence 15, Appl
139	33	68.8	173	4	PCT-US91-02946-3	Sequence 3, Appl	212	33	68.8	638	3	US-09-070-637-20	Sequence 20, Appl
140	33	68.8	203	4	PCT-US91-02946-3	Sequence 3, Appl	213	33	68.8	964	2	US-09-949-016-7A31	Sequence 7A31, Ap
141	33	68.8	218	4	PCT-US94-14106-61	Sequence 4142, A	214	33	68.8	964	2	US-09-949-016-7A31	Sequence 26787, A
142	33	68.8	219	2	US-09-027-449-72	Sequence 72, Appl	215	33	66.7	110	1	US-08-244-626-2	Sequence 2, Appl
143	33	68.8	219	2	US-09-026-985-72	Sequence 72, Appl	216	33	66.7	110	1	US-08-244-626-2	Sequence 2, Appl
144	33	68.8	219	2	US-09-121-952A-72	Sequence 72, Appl	217	33	66.7	111	2	US-09-840-455-11	Sequence 11, Appl
145	33	68.8	219	2	US-09-234-340A-72	Sequence 72, Appl	218	33	66.7	375	1	US-07-803-622E-7	Sequence 7, Appl
146	33	68.8	219	2	US-09-355-014-72	Sequence 72, Appl	219	33	66.7	421	2	US-09-803-622E-9	Sequence 9, Appl
147	33	68.8	219	2	US-08-324-591-12	Sequence 12, Appl	220	33	66.7	421	2	US-09-270-767-3A159	Sequence 3A159, A
148	33	68.8	228	1	US-08-324-591-12	Sequence 12, Appl	221	33	66.7	421	2	US-09-270-767-49376	Sequence 49376, A
149	33	68.8	228	1	US-08-324-591-12	Sequence 12, Appl	222	33	66.7	741	2	US-09-107-533A-5001	Sequence 5001, Ap
150	33	68.8	228	1	US-08-324-591-12	Sequence 12, Appl	223	33	66.7	741	2	US-08-934-915-76	Sequence 76, Appl
151	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	224	33	66.7	30	1	US-08-934-915-76	Sequence 5209, Ap
152	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	225	33	66.7	53	2	US-09-513-999C-5209	Sequence 5209, Ap
153	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	226	33	66.7	70	2	US-09-513-999C-5209	Sequence 7776, Ap
154	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	227	33	66.7	70	2	US-09-513-999C-5209	Sequence 971, App
155	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	228	33	66.7	70	2	US-09-513-999C-5209	Sequence 971, App
156	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	229	33	66.7	100	2	US-09-840-459-23	Sequence 23, Appl
157	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	230	33	66.7	148	2	US-09-497-625A-23	Sequence 2971, Ap
158	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	231	33	66.7	151	2	US-10-104-04-2971	Sequence 49120, A
159	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	232	33	66.7	151	2	US-09-270-767-49120	Sequence 49120, A
160	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	233	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
161	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	234	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
162	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	235	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
163	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	236	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
164	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	237	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
165	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	238	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
166	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	239	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
167	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	240	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
168	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	241	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
169	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	242	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
170	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	243	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
171	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	244	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
172	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	245	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl
173	33	68.8	228	2	US-09-166-093-21	Sequence 21, Appl	246	33	66.7	151	2	US-08-441-629-17	Sequence 17, Appl

247	30	62.5	12	2	US-09-400-564-3	Sequence 3, Appl1	320	30	62.5	673	1	US-08-577-492-35	Sequence 35, Appl1
248	30	62.5	13	2	US-09-400-564-2	Sequence 2, Appl1	321	30	62.5	673	1	US-08-474-379C-63	Sequence 63, Appl1
249	30	62.5	14	2	US-09-400-564-1	Sequence 1, Appl1	322	30	62.5	673	2	US-09-146-249A-63	Sequence 63, Appl1
250	30	62.5	15	2	US-09-400-564-4	Sequence 4, Appl1	323	30	62.5	673	2	US-08-206-188B-63	Sequence 63, Appl1
251	30	62.5	27	2	US-09-400-564-13	Sequence 13, Appl1	324	30	62.5	673	2	US-09-079-630-35	Sequence 35, Appl1
252	30	62.5	30	1	US-08-934-915-54	Sequence 42998, A	325	30	62.5	911	1	US-08-928-692-59	Sequence 59, Appl1
253	30	62.5	50	1	US-09-270-767-42998	Sequence 40840, A	326	30	62.5	911	2	US-09-107-532A-59	Sequence 4818, Ap
254	30	62.5	60	2	US-09-270-767-40840	Sequence 56056, A	327	29	60.4	64	2	US-09-248-796A-27891	Sequence 27891, A
255	30	62.5	60	2	US-09-270-767-56056	Sequence 4615, Ap	328	29	60.4	73	2	US-09-583-110-3243	Sequence 3243, Ap
256	30	62.5	73	2	US-09-513-999C-4615	Sequence 21621, A	329	29	60.4	96	2	US-10-194-975-77	Sequence 77, Appl1
257	30	62.5	84	2	US-09-248-796A-21621	Sequence 3972, Ap	330	29	60.4	100	2	US-10-194-975-77	Sequence 28, Appl1
258	30	62.5	88	2	US-09-621-976-3972	Sequence 4665, Ap	331	29	60.4	108	1	US-08-378-939-38	Sequence 30, Appl1
259	30	62.5	100	2	US-09-621-976-4465	Sequence 25, Appl1	332	29	60.4	113	2	US-08-378-939-38	Sequence 19, Appl1
260	30	62.5	100	2	US-09-840-459-25	Sequence 29, Appl1	333	29	60.4	113	2	US-09-232-290-19	Sequence 26, Appl1
261	30	62.5	100	2	US-09-840-459-29	Sequence 25, Appl1	334	29	60.4	113	2	US-09-232-290-19	Sequence 26, Appl1
262	30	62.5	100	2	US-09-497-625A-25	Sequence 29, Appl1	335	29	60.4	117	2	US-08-337-871A-26	Sequence 28, Appl1
263	30	62.5	100	2	US-09-497-625A-29	Sequence 29, Appl1	336	29	60.4	128	2	US-09-755-665-28	Sequence 6, Appl1
264	30	62.5	111	2	US-10-194-975-119	Sequence 119, App	337	29	60.4	129	2	US-09-476-482-6	Sequence 27891, A
265	30	62.5	112	2	US-09-724-409-2	Sequence 2, Appl1	338	29	60.4	129	2	US-09-185-245-2	Sequence 7217, Ap
266	30	62.5	112	2	US-09-724-530-2	Sequence 2, Appl1	339	29	60.4	129	2	US-09-185-245-2	Sequence 7217, Ap
267	30	62.5	112	2	US-09-328-296-2	Sequence 2, Appl1	340	29	60.4	145	2	US-09-185-245-3	Sequence 3, Appl1
268	30	62.5	113	2	US-09-232-290-13	Sequence 13, Appl1	341	29	60.4	145	2	US-09-919-497-68	Sequence 68, Appl1
269	30	62.5	119	2	US-09-621-976-5890	Sequence 5890, Ap	342	29	60.4	147	2	US-09-755-665-32	Sequence 32, Appl1
270	30	62.5	131	1	US-07-977-696C-11	Sequence 11, Appl1	343	29	60.4	160	2	US-09-436-653C-18	Sequence 4, Appl1
271	30	62.5	131	1	US-08-129-930B-11	Sequence 11, Appl1	344	29	60.4	172	2	US-09-185-245-4	Sequence 4, Appl1
272	30	62.5	131	2	US-08-976-288A-11	Sequence 11, Appl1	345	29	60.4	172	2	US-09-185-245-4	Sequence 4, Appl1
273	30	62.5	133	2	US-09-947-839B-11	Sequence 27939, A	346	29	60.4	172	2	US-09-1010-147B-4	Sequence 272, App
274	30	62.5	146	2	US-09-252-991A-29319	Sequence 27939, A	347	29	60.4	181	2	US-09-198-452A-272	Sequence 262, App
275	30	62.5	146	2	US-09-252-991A-27939	Sequence 31928, A	348	29	60.4	212	2	US-09-438-185A-262	Sequence 34873, A
276	30	62.5	150	2	US-09-270-767-11928	Sequence 47145, A	349	29	60.4	212	2	US-09-270-767-34873	Sequence 50090, A
277	30	62.5	150	2	US-09-270-767-77145	Sequence 33631, A	350	29	60.4	212	2	US-09-270-767-50090	Sequence 18766, A
278	30	62.5	162	2	US-09-270-767-39361	Sequence 54578, A	351	29	60.4	226	2	US-09-248-796A-18766	Sequence 37664, A
279	30	62.5	162	2	US-09-270-767-54578	Sequence 5029, Ap	352	29	60.4	229	2	US-09-270-767-37664	Sequence 52881, A
280	30	62.5	216	2	US-09-338-352-5029	Sequence 4199, Ap	353	29	60.4	239	2	US-09-270-767-44181	Sequence 45181, A
281	30	62.5	228	2	US-09-134-001C-4199	Sequence 30638, A	354	29	60.4	264	2	US-09-627-650B-18	Sequence 18, Appl1
282	30	62.5	234	2	US-09-252-991A-30638	Sequence 13, Appl1	355	29	60.4	264	2	US-09-436-653C-18	Sequence 4, Appl1
283	30	62.5	241	2	US-08-902-486-13	Sequence 44941, A	356	29	60.4	267	2	US-08-969-415-4	Sequence 2, Appl1
284	30	62.5	244	2	US-09-270-767-44941	Sequence 7, Appl1	357	29	60.4	267	2	US-08-969-415-4	Sequence 2, Appl1
285	30	62.5	246	1	US-08-257-341-7	Sequence 4, Appl1	358	29	60.4	283	2	US-09-554-765-2	Sequence 6, Appl1
286	30	62.5	252	1	US-08-133-804-4	Sequence 4, Appl1	359	29	60.4	285	2	US-09-317-557-6	Sequence 23284, A
287	30	62.5	252	1	US-08-461-838-4	Sequence 4, Appl1	360	29	60.4	285	2	US-09-317-557-6	Sequence 24, Appl1
288	30	62.5	252	1	US-08-461-836-4	Sequence 1, Appl1	361	29	60.4	318	2	US-09-252-991A-23284	Sequence 24, Appl1
289	30	62.5	260	1	US-08-447-402-1	Sequence 42, Appl1	362	29	60.4	318	2	US-09-252-991A-23284	Sequence 24, Appl1
290	30	62.5	263	1	US-08-474-379C-42	Sequence 42, Appl1	363	29	60.4	328	2	US-09-340-858B-24	Sequence 267, Ap
291	30	62.5	263	1	US-09-146-249A-42	Sequence 42, Appl1	364	29	60.4	341	2	US-09-180-109A-24	Sequence 21, Appl1
292	30	62.5	263	2	US-08-206-188B-42	Sequence 42, Appl1	365	29	60.4	341	2	US-09-180-109A-24	Sequence 21, Appl1
293	30	62.5	265	1	US-07-688-352C-42	Sequence 134, App	366	29	60.4	341	2	US-09-180-109A-24	Sequence 29, Appl1
294	30	62.5	269	2	US-09-070-408-132	Sequence 40192, A	367	29	60.4	341	2	US-09-180-109A-27	Sequence 24, Appl1
295	30	62.5	289	2	US-09-270-767-40192	Sequence 55408, A	368	29	60.4	346	2	US-09-949-016-3264	Sequence 9264, Ap
296	30	62.5	289	2	US-09-270-767-55408	Sequence 35931, A	369	29	60.4	384	2	US-08-198-446B-11	Sequence 11, Appl1
297	30	62.5	323	2	US-09-270-767-35931	Sequence 51148, A	370	29	60.4	401	1	US-08-870-693-11	Sequence 765, App
298	30	62.5	323	2	US-09-270-767-51148	Sequence 5, Appl1	371	29	60.4	401	1	US-08-870-693-11	Sequence 15, Appl1
299	30	62.5	367	1	US-08-257-341-5	Sequence 24675, A	372	29	60.4	401	2	US-09-538-092-765	Sequence 14, Appl1
300	30	62.5	377	1	US-09-252-991A-44675	Sequence 44, Appl1	373	29	60.4	408	2	US-09-554-765-15	Sequence 14, Appl1
301	30	62.5	386	1	US-07-688-352C-44	Sequence 41, Appl1	374	29	60.4	409	2	US-09-554-765-15	Sequence 44594, A
302	30	62.5	386	1	PCT-US91-02714-41	Sequence 44, Appl1	375	29	60.4	409	2	US-09-252-991A-28550	Sequence 31174, A
303	30	62.5	404	1	US-08-474-379C-44	Sequence 44, Appl1	376	29	60.4	440	2	US-09-627-650B-17	Sequence 17, Appl1
304	30	62.5	404	2	US-09-146-249A-44	Sequence 44, Appl1	377	29	60.4	440	2	US-09-627-650B-17	Sequence 1114, Ap
305	30	62.5	420	2	US-08-206-188B-44	Sequence 6639, Ap	378	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
306	30	62.5	420	2	US-09-949-016-6639	Sequence 6640, Ap	379	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
307	30	62.5	428	2	US-09-949-016-6640	Sequence 40792, A	380	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
308	30	62.5	432	2	US-09-270-767-40792	Sequence 56008, A	381	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
309	30	62.5	432	2	US-09-270-767-56008	Sequence 7854, Ap	382	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
310	30	62.5	436	2	US-09-949-016-7854	Sequence 61, Appl1	383	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
311	30	62.5	451	1	US-08-474-379C-61	Sequence 61, Appl1	384	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
312	30	62.5	451	2	US-09-146-249A-61	Sequence 61, Appl1	385	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
313	30	62.5	451	2	US-08-206-188B-61	Sequence 9498, Ap	386	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
314	30	62.5	452	2	US-09-949-016-9498	Sequence 4, Appl1	387	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
315	30	62.5	484	2	US-09-377-557-4	Sequence 15, Appl1	388	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
316	30	62.5	496	2	US-08-902-486-15	Sequence 4, Appl1	389	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
317	30	62.5	517	2	US-09-602-735B-4	Sequence 2, Appl1	390	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
318	30	62.5	518	2	US-09-602-735B-2	Sequence 2, Appl1	391	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap
319	30	62.5	663	2	US-09-328-352-6441	Sequence 6441, Ap	392	29	60.4	449	2	US-09-436-653C-17	Sequence 1060, Ap

393	29	60.4	4126	2	US-09-953-096-4	Sequence 4, Appl1	466	28	58.3	276	2	US-09-248-796A-16179	Sequence 16179, A
394	29	60.4	5518	2	US-09-953-096-2	Sequence 2, Appl1	467	28	58.3	290	2	US-09-252-991A-29035	Sequence 29035, A
395	28.5	59.4	3878	2	US-09-914-259-11	Sequence 11, Appl1	468	28	58.3	293	2	US-09-512-342-14	Sequence 14, Appl1
396	28	58.3	14	2	US-09-127-815D-38	Sequence 38, Appl1	469	28	58.3	314	2	US-09-270-767-43045	Sequence 43045, A
397	28	58.3	14	2	US-10-095-450-38	Sequence 38, Appl1	470	28	58.3	333	2	US-09-562-737-2	Sequence 2, Appl1
398	28	58.3	14	2	US-10-648-642-38	Sequence 38, Appl1	471	28	58.3	337	2	US-09-252-991A-21261	Sequence 21261, A
399	28	58.3	60	4	PCT-US93-11154-3	Sequence 3, Appl1	472	28	58.3	350	2	US-09-438-185A-285	Sequence 285, App
400	28	58.3	60	4	PCT-US93-11154-7	Sequence 7, Appl1	473	28	58.3	363	2	US-10-314-048A-32	Sequence 32, Appl1
401	28	58.3	60	4	PCT-US93-11154-10	Sequence 10, Appl1	474	28	58.3	363	2	US-10-314-048A-36	Sequence 36, Appl1
402	28	58.3	61	2	US-09-489-039A-21318	Sequence 11318, A	475	28	58.3	400	1	US-08-624-061-8	Sequence 8, Appl1
403	28	58.3	67	2	US-09-248-796A-21633	Sequence 21633, A	476	28	58.3	443	2	US-09-270-767-46616	Sequence 46616, A
404	28	58.3	68	2	US-09-976-594-568	Sequence 568, App	477	28	58.3	446	2	US-09-489-039A-11543	Sequence 11543, A
405	28	58.3	69	2	US-09-370-767-39219	Sequence 39219, A	478	28	58.3	451	2	US-09-565-501A-108	Sequence 108, App
406	28	58.3	69	2	US-09-270-767-54436	Sequence 54436, A	479	28	58.3	451	2	US-09-639-206A-108	Sequence 108, App
407	28	58.3	75	2	US-09-248-796A-23022	Sequence 23022, A	480	28	58.3	451	2	US-09-874-923-108	Sequence 108, App
408	28	58.3	75	2	US-09-248-796A-27065	Sequence 27065, A	481	28	58.3	476	2	US-09-675-018B-8	Sequence 8, Appl1
409	28	58.3	77	2	US-09-255-518C-15	Sequence 15, Appl1	482	28	58.3	476	2	US-09-428-041-8	Sequence 10, Appl1
410	28	58.3	77	2	US-09-255-518C-40	Sequence 40, Appl1	483	28	58.3	476	2	US-10-428-041-8	Sequence 10, Appl1
411	28	58.3	86	2	US-09-949-016-10474	Sequence 10474, A	484	28	58.3	476	2	US-10-428-041-10	Sequence 10, Appl1
412	28	58.3	94	2	US-09-198-452A-1181	Sequence 1181, A	485	28	58.3	494	2	US-09-248-796A-18116	Sequence 18116, A
413	28	58.3	99	2	US-09-583-110-3401	Sequence 3401, Ap	486	28	58.3	494	2	US-09-792-024-65	Sequence 65, Appl1
414	28	58.3	100	2	US-09-472-087-113	Sequence 113, App	487	28	58.3	497	2	US-09-248-796A-17122	Sequence 17122, A
415	28	58.3	100	2	US-09-840-459-24	Sequence 24, Appl1	488	28	58.3	521	2	US-09-252-991A-18266	Sequence 18266, A
416	28	58.3	100	2	US-09-497-625A-24	Sequence 24, Appl1	489	28	58.3	584	2	US-09-949-016-10340	Sequence 10340, A
417	28	58.3	100	2	US-10-194-975-75	Sequence 75, Appl1	490	28	58.3	584	2	US-09-949-016-10341	Sequence 10341, A
418	28	58.3	100	2	US-10-194-975-76	Sequence 76, Appl1	491	28	58.3	595	2	US-09-328-352-4432	Sequence 4432, Ap
419	28	58.3	101	2	US-09-513-999C-41718	Sequence 4718, Ap	492	28	58.3	604	2	US-09-949-016-6585	Sequence 6585, Ap
420	28	58.3	101	2	US-09-902-540-9784	Sequence 9784, Ap	493	28	58.3	604	2	US-09-949-016-10250	Sequence 10250, A
421	28	58.3	102	2	US-09-621-976-4176	Sequence 4176, Ap	494	28	58.3	605	2	US-09-902-540-12393	Sequence 12393, A
422	28	58.3	111	2	US-09-809-739-13	Sequence 13, Appl1	495	28	58.3	649	2	US-09-418-963-2	Sequence 2, Appl1
423	28	58.3	111	2	US-09-840-459-59	Sequence 59, Appl1	496	28	58.3	670	2	US-09-543-681A-5979	Sequence 5979, Ap
424	28	58.3	111	2	US-09-497-625A-11	Sequence 11, Appl1	497	28	58.3	677	2	US-09-543-681A-5460	Sequence 5460, Ap
425	28	58.3	111	2	US-09-497-625A-55	Sequence 55, Appl1	498	28	58.3	684	2	US-09-489-039A-13496	Sequence 13496, A
426	28	58.3	112	1	US-07-942-245-28	Sequence 28, Appl1	499	28	58.3	685	2	US-09-252-991A-32382	Sequence 32382, A
427	28	58.3	112	1	US-08-477-877B-89	Sequence 89, Appl1	500	28	58.3	752	2	US-10-104-047-2991	Sequence 2991, Ap
428	28	58.3	112	1	US-08-472-281A-89	Sequence 89, Appl1	501	28	58.3	838	1	US-08-868-786-4	Sequence 4, Appl1
429	28	58.3	112	1	US-08-477-989B-89	Sequence 89, Appl1	502	28	58.3	936	2	US-10-104-047-2621	Sequence 2621, Ap
430	28	58.3	112	2	US-09-840-459-55	Sequence 55, Appl1	503	28	58.3	1105	2	US-09-270-767-44167	Sequence 44167, A
431	28	58.3	112	2	US-09-840-459-56	Sequence 56, Appl1	504	28	58.3	1123	2	US-09-408-865-1	Sequence 1, Appl1
432	28	58.3	112	2	US-09-840-459-57	Sequence 57, Appl1	505	28	58.3	1128	2	US-09-252-991A-19672	Sequence 19672, A
433	28	58.3	112	2	US-09-840-459-58	Sequence 58, Appl1	506	28	58.3	1245	2	US-09-543-681A-5592	Sequence 5592, Ap
434	28	58.3	112	2	US-09-840-459-61	Sequence 61, Appl1	507	28	58.3	1448	2	US-08-882-046-6	Sequence 6, Appl1
435	28	58.3	112	2	US-09-840-459-66	Sequence 66, Appl1	508	28	58.3	1248	2	US-09-566-047-6	Sequence 6, Appl1
436	28	58.3	112	2	US-09-840-459-67	Sequence 67, Appl1	509	28	58.3	1270	2	US-09-248-796A-15522	Sequence 15522, A
437	28	58.3	112	2	US-09-497-625A-55	Sequence 55, Appl1	510	28	58.3	2221	2	US-09-230-652-2	Sequence 2, Appl1
438	28	58.3	112	2	US-09-497-625A-56	Sequence 56, Appl1	511	28	58.3	2532	2	US-09-215-694-10	Sequence 10, Appl1
439	28	58.3	112	2	US-09-497-625A-57	Sequence 57, Appl1	512	28	58.3	2833	2	US-10-109-310-10	Sequence 10, Appl1
440	28	58.3	112	2	US-09-497-625A-58	Sequence 58, Appl1	513	28	58.3	2813	4	US-09-381-261A-1	Sequence 1, Appl1
441	28	58.3	112	2	US-09-497-625A-61	Sequence 61, Appl1	514	28	58.3	2938	2	PCT-US94-00198-3	Sequence 3, Appl1
442	28	58.3	112	2	US-09-497-625A-66	Sequence 66, Appl1	515	28	58.3	3072	2	US-09-413-814-93	Sequence 93, Appl1
443	28	58.3	112	2	US-09-497-625A-67	Sequence 67, Appl1	516	28	58.3	3079	2	US-09-413-814-80	Sequence 80, Appl1
444	28	58.3	112	2	US-09-254-180C-8	Sequence 8, Appl1	517	28	58.3	3092	2	US-09-487-558B-172	Sequence 172, Appl1
445	28	58.3	112	2	US-09-462-140D-97	Sequence 97, Appl1	518	27	56.2	8	2	US-09-127-815D-5	Sequence 5, Appl1
446	28	58.3	125	2	US-09-370-767-33517	Sequence 33517, A	519	27	56.2	8	2	US-09-127-815D-6	Sequence 6, Appl1
447	28	58.3	125	2	US-09-370-767-48734	Sequence 48734, A	520	27	56.2	8	2	US-10-095-450-5	Sequence 5, Appl1
448	28	58.3	130	2	US-09-540-236-2776	Sequence 2776, Ap	521	27	56.2	8	2	US-10-095-450-6	Sequence 6, Appl1
449	28	58.3	131	2	US-09-511-021-44	Sequence 44, Appl1	522	27	56.2	8	2	US-10-648-642-5	Sequence 5, Appl1
450	28	58.3	135	1	US-08-259-372A-12	Sequence 12, Appl1	523	27	56.2	8	2	US-10-648-642-6	Sequence 6, Appl1
451	28	58.3	135	1	US-08-468-671-12	Sequence 12, Appl1	524	27	56.2	24	2	US-09-270-767-33191	Sequence 33191, A
452	28	58.3	149	2	US-10-326-795-27	Sequence 27, Appl1	525	27	56.2	24	2	US-09-270-767-49408	Sequence 49408, A
453	28	58.3	154	2	US-09-370-767-41616	Sequence 41616, A	526	27	56.2	27	2	US-09-749-637A-371	Sequence 371, App
454	28	58.3	166	2	US-09-270-767-39029	Sequence 39029, A	527	27	56.2	27	2	US-09-749-637A-374	Sequence 374, App
455	28	58.3	166	2	US-09-270-767-41146	Sequence 41146, A	528	27	56.2	29	2	US-09-749-637A-367	Sequence 367, App
456	28	58.3	166	2	US-09-270-767-54246	Sequence 54246, A	529	27	56.2	29	2	US-09-749-637A-368	Sequence 368, App
457	28	58.3	166	2	US-09-270-767-56362	Sequence 56362, A	530	27	56.2	29	2	US-09-749-637A-370	Sequence 370, App
458	28	58.3	170	2	US-09-252-991A-27727	Sequence 27727, A	531	27	56.2	29	2	US-09-749-637A-373	Sequence 373, App
459	28	58.3	172	2	US-09-107-433-2814	Sequence 2814, Ap	532	27	56.2	30	2	US-09-486-394-3	Sequence 3, Appl1
460	28	58.3	202	2	US-08-388-852B-38	Sequence 38, Appl1	533	27	56.2	38	2	US-08-545-860D-67	Sequence 67, Appl1
461	28	58.3	218	2	US-09-543-681A-8027	Sequence 8027, Ap	534	27	56.2	38	4	PCT-US94-04486-67	Sequence 67, Appl1
462	28	58.3	232	2	US-09-543-681A-5424	Sequence 5424, Ap	535	27	56.2	41	2	US-09-282-029A-12	Sequence 12, Appl1
463	28	58.3	256	2	US-09-270-767-35216	Sequence 35216, A	536	27	56.2	41	2	US-09-185-908-12	Sequence 12, Appl1
464	28	58.3	256	2	US-09-370-767-50433	Sequence 50433, A	537	27	56.2	41	2	US-09-434-355A-12	Sequence 12, Appl1
465	28	58.3	265	2	US-09-328-352-4811	Sequence 4811, Ap	538	27	56.2	42	2	US-09-270-767-35410	Sequence 35410, A

539	27	56.2	42	2	US-09-270-767-50627	Sequence 50627, A	612	27	56.2	215	2	US-09-270-767-61999	Sequence 61999, A
540	27	56.2	47	2	US-09-288-143-95	Sequence 95, Appl	613	27	56.2	219	2	US-09-270-767-57971	Sequence 57971, A
541	27	56.2	52	2	US-09-230-637-58	Sequence 58, Appl	614	27	56.2	221	2	US-09-328-352-4715	Sequence 4715, Ap
542	27	56.2	54	2	US-09-513-999C-7610	Sequence 7610, Ap	615	27	56.2	222	2	US-09-540-236-2168	Sequence 2168, Ap
543	27	56.2	55	2	US-09-270-767-36103	Sequence 36103, A	616	27	56.2	223	2	US-09-270-767-38098	Sequence 38098, A
544	27	56.2	55	2	US-09-270-767-51320	Sequence 51320, A	617	27	56.2	223	2	US-09-270-767-53315	Sequence 53315, A
545	27	56.2	55	2	US-09-471-776-1168	Sequence 1168, Ap	618	27	56.2	233	2	US-08-871-572B-8	Sequence 8, Appl
546	27	56.2	56	2	US-09-621-976-5720	Sequence 5720, Ap	619	27	56.2	234	2	US-09-270-767-42924	Sequence 42924, A
547	27	56.2	62	2	US-09-188-930-178	Sequence 178, App	620	27	56.2	238	2	US-09-839-894-2	Sequence 2, Appl
548	27	56.2	62	2	US-09-312-283C-178	Sequence 11, Appl	621	27	56.2	247	2	US-09-130-491-15	Sequence 15, Appl
549	27	56.2	62	2	US-09-079-030-11	Sequence 11, Appl	622	27	56.2	259	2	US-09-540-236-2112	Sequence 2112, Ap
550	27	56.2	65	2	US-09-248-796A-23310	Sequence 23310, A	623	27	56.2	259	2	US-09-540-236-2112	Sequence 2, Appl
551	27	56.2	66	2	US-09-328-352-7701	Sequence 7701, Ap	624	27	56.2	263	1	US-08-088-633-4	Sequence 4, Appl
552	27	56.2	66	2	US-09-489-039A-10198	Sequence 10198, A	625	27	56.2	263	1	US-08-441-750-4	Sequence 4, Appl
553	27	56.2	67	2	US-09-489-039A-7673	Sequence 7673, Ap	626	27	56.2	263	1	US-08-441-751-4	Sequence 4, Appl
554	27	56.2	67	2	US-09-621-976-4368	Sequence 4368, Ap	627	27	56.2	263	1	US-09-270-767-49064	Sequence 49064, A
555	27	56.2	68	2	US-09-248-796A-26589	Sequence 26589, A	628	27	56.2	263	4	PCT-US92-02521-4	Sequence 4, Appl
556	27	56.2	71	2	US-09-312-283C-386	Sequence 386, App	629	27	56.2	265	2	US-09-270-767-46420	Sequence 46420, A
557	27	56.2	72	2	US-09-270-767-58951	Sequence 58951, A	630	27	56.2	265	2	US-09-582-779A-2	Sequence 2, Appl
558	27	56.2	73	2	US-09-248-796A-21511	Sequence 21511, A	631	27	56.2	267	2	US-09-949-016-11056	Sequence 11056, A
559	27	56.2	74	2	US-10-012-231A-189	Sequence 189, App	632	27	56.2	273	2	US-09-489-039A-11564	Sequence 11564, A
560	27	56.2	74	2	US-10-015-389A-189	Sequence 189, App	633	27	56.2	287	2	US-09-540-236-2615	Sequence 2615, Ap
561	27	56.2	74	2	US-10-006-768A-189	Sequence 189, App	634	27	56.2	290	2	US-09-993-777-17	Sequence 17, Appl
562	27	56.2	74	2	US-10-015-671A-189	Sequence 189, App	635	27	56.2	292	4	PCT-US96-03916-17	Sequence 17, Appl
563	27	56.2	74	2	US-10-015-393A-189	Sequence 189, App	636	27	56.2	292	4	US-09-993-777-17	Sequence 17, Appl
564	27	56.2	74	2	US-10-011-833A-189	Sequence 189, App	637	27	56.2	295	2	US-09-270-767-62384	Sequence 62384, A
565	27	56.2	74	2	US-10-006-041A-189	Sequence 189, App	638	27	56.2	302	4	PCT-US91-02714-21	Sequence 21, Appl
566	27	56.2	74	2	US-10-012-064A-189	Sequence 189, App	639	27	56.2	302	2	US-09-917-265A-53	Sequence 53, Appl
567	27	56.2	77	2	US-09-621-976-7042	Sequence 7042, Ap	640	27	56.2	312	2	US-09-248-796A-20385	Sequence 20385, A
568	27	56.2	82	2	US-09-749-637A-393	Sequence 393, App	641	27	56.2	316	1	US-09-489-039A-89904	Sequence 8904, Ap
569	27	56.2	88	2	US-09-489-039A-13762	Sequence 13762, A	642	27	56.2	317	1	US-08-864-799-4	Sequence 4, Appl
570	27	56.2	90	2	US-09-540-236-3200	Sequence 3200, Ap	643	27	56.2	317	1	US-08-864-799-5	Sequence 5, Appl
571	27	56.2	100	2	US-09-840-459-30	Sequence 30, Appl	644	27	56.2	330	2	US-09-949-016-11333	Sequence 11333, A
572	27	56.2	100	2	US-09-497-625A-30	Sequence 182, App	645	27	56.2	330	2	US-09-543-681A-6096	Sequence 6096, Ap
573	27	56.2	107	2	US-08-311-731A-182	Sequence 63, Appl	646	27	56.2	331	1	US-09-582-660-5	Sequence 5, Appl
574	27	56.2	113	2	US-09-840-459-53	Sequence 63, Appl	647	27	56.2	335	1	US-08-683-743-4	Sequence 4, Appl
575	27	56.2	113	2	US-09-497-625A-63	Sequence 5472, Ap	648	27	56.2	335	2	US-09-870-574-3	Sequence 3, Appl
576	27	56.2	116	2	US-09-513-999C-5472	Sequence 5407, Ap	649	27	56.2	335	2	US-09-265-540E-6	Sequence 6, Appl
577	27	56.2	119	2	US-09-107-532A-5407	Sequence 5407, Ap	650	27	56.2	335	2	US-09-248-796A-19440	Sequence 19440, A
578	27	56.2	129	2	US-09-270-767-41245	Sequence 41245, A	651	27	56.2	329	1	US-08-956-012-1	Sequence 1, Appl
579	27	56.2	129	2	US-09-270-767-56461	Sequence 56461, A	652	27	56.2	329	2	US-09-917-265A-59	Sequence 59, Appl
580	27	56.2	133	2	US-09-270-767-58290	Sequence 58290, A	653	27	56.2	329	2	US-09-170-496D-130	Sequence 130, App
581	27	56.2	133	2	US-09-540-236-3319	Sequence 3319, Ap	654	27	56.2	332	2	US-09-170-496D-232	Sequence 232, App
582	27	56.2	142	2	US-09-270-767-31887	Sequence 31887, A	655	27	56.2	343	2	US-09-270-767-42655	Sequence 42655, A
583	27	56.2	142	2	US-09-270-767-41841	Sequence 41841, A	656	27	56.2	344	2	US-10-314-048A-151	Sequence 151, App
584	27	56.2	142	2	US-09-270-767-47104	Sequence 47104, A	657	27	56.2	355	1	US-08-311-731A-82	Sequence 82, Appl
585	27	56.2	145	2	US-09-068-655-11	Sequence 11, Appl	658	27	56.2	355	1	US-08-153-848-28	Sequence 28, Appl
586	27	56.2	150	2	US-09-188-930-306	Sequence 306, App	659	27	56.2	355	1	US-08-153-848-32	Sequence 32, Appl
587	27	56.2	150	2	US-09-312-283C-306	Sequence 306, App	660	27	56.2	355	2	US-09-289-843A-28	Sequence 28, Appl
588	27	56.2	152	2	US-09-134-000C-3628	Sequence 3628, Ap	661	27	56.2	355	2	US-09-289-843A-32	Sequence 32, Appl
589	27	56.2	160	2	US-09-489-039A-9288	Sequence 9288, Ap	662	27	56.2	355	2	US-09-088-337B-28	Sequence 28, Appl
590	27	56.2	163	2	US-09-270-767-37161	Sequence 37161, A	663	27	56.2	355	2	US-09-088-337B-32	Sequence 32, Appl
591	27	56.2	163	2	US-09-270-767-52378	Sequence 52378, A	664	27	56.2	355	2	US-09-170-496D-130	Sequence 130, App
592	27	56.2	164	2	US-10-101-464A-594	Sequence 594, App	665	27	56.2	355	2	US-09-917-254-68	Sequence 68, Appl
593	27	56.2	167	2	US-09-270-767-34452	Sequence 34452, A	666	27	56.2	355	2	US-09-917-254-68	Sequence 68, Appl
594	27	56.2	167	2	US-09-270-767-49669	Sequence 49669, A	667	27	56.2	355	2	PCT-US93-11153-28	Sequence 32, Appl
595	27	56.2	175	2	US-09-270-767-45716	Sequence 45716, A	668	27	56.2	364	2	US-09-270-767-14639	Sequence 3639, A
596	27	56.2	180	1	US-07-949-812-5	Sequence 5, Appl	669	27	56.2	364	2	US-09-270-767-19856	Sequence 4856, A
597	27	56.2	182	2	US-09-068-655-4	Sequence 4, Appl	670	27	56.2	374	2	US-09-333-998E-27	Sequence 27, Appl
598	27	56.2	184	2	US-09-270-767-36312	Sequence 36312, A	671	27	56.2	379	2	US-09-481-577-28	Sequence 28, Appl
599	27	56.2	184	2	US-09-270-767-51529	Sequence 51529, A	672	27	56.2	379	2	US-09-248-796A-20643	Sequence 20643, A
600	27	56.2	184	2	US-09-902-540-15601	Sequence 15601, A	673	27	56.2	398	1	US-08-474-379C-86	Sequence 86, Appl
601	27	56.2	199	1	US-08-474-379C-38	Sequence 38, Appl	674	27	56.2	398	1	US-09-134-000C-6229	Sequence 6229, Ap
602	27	56.2	199	2	US-09-146-249A-38	Sequence 38, Appl	675	27	56.2	400	2	US-09-107-433-1170	Sequence 1170, Ap
603	27	56.2	199	2	US-08-206-188B-38	Sequence 38, Appl	676	27	56.2	403	2	US-09-248-796A-19438	Sequence 19438, A
604	27	56.2	199	2	US-10-090-365-35	Sequence 35, Appl	677	27	56.2	414	2	US-09-949-016-6201	Sequence 6201, Ap
605	27	56.2	201	4	US-09-728-911-35	Sequence 35, Appl	678	27	56.2	416	2	US-09-949-016-6201	Sequence 6201, Ap
606	27	56.2	201	1	US-07-688-352C-38	Sequence 38, Appl	679	27	56.2	423	2	US-09-583-110-3518	Sequence 3518, Ap
607	27	56.2	201	4	PCT-US91-02714-37	Sequence 37, Appl	680	27	56.2	433	2	US-09-949-016-10900	Sequence 10900, A
608	27	56.2	203	2	US-09-270-767-38554	Sequence 38554, A	681	27	56.2	436	2	US-09-150-213-4	Sequence 14, Appl
609	27	56.2	203	2	US-09-270-767-42964	Sequence 42964, A	682	27	56.2	443	2	US-09-675-018B-12	Sequence 12, Appl
610	27	56.2	203	2	US-09-270-767-53771	Sequence 53771, A	683	27	56.2	443	2	US-10-428-041-12	Sequence 12, Appl
611	27	56.2	209	2	US-09-270-767-43665	Sequence 43665, A	684	27	56.2	444	2	US-09-489-039A-10106	Sequence 10106, A

685	27	56.2	450	2	US-09-252-991A-31528	Sequence 31528, A	758	27	56.2	886	2	US-08-206-188B-55	Sequence 65, Appl
686	27	56.2	454	2	US-09-252-991A-28716	Sequence 28716, A	759	27	56.2	898	1	US-08-474-379C-12	Sequence 12, Appl
687	27	56.2	463	2	US-09-489-039A-13405	Sequence 13405, A	760	27	56.2	898	2	US-09-146-249A-12	Sequence 12, Appl
688	27	56.2	469	1	US-08-968-751-2	Sequence 2, Appl1	761	27	56.2	898	2	US-08-206-188B-12	Sequence 12, Appl
689	27	56.2	469	2	US-09-052-089A-1	Sequence 1, Appl1	762	27	56.2	901	1	US-07-688-352C-12	Sequence 12, Appl
690	27	56.2	469	2	US-09-949-016-6664	Sequence 6664, Ap	763	27	56.2	901	2	US-09-917-254-93	Sequence 93, Appl
691	27	56.2	469	2	US-09-716-536-1	Sequence 1, Appl1	764	27	56.2	916	2	US-10-104-047-2297	Sequence 2297, Ap
692	27	56.2	476	2	US-09-675-018B-13	Sequence 13, Appl	765	27	56.2	927	2	US-09-270-767-46518	Sequence 46518, A
693	27	56.2	476	2	US-09-675-018B-14	Sequence 14, Appl	766	27	56.2	1032	2	US-09-733-643B-16	Sequence 16, Appl
694	27	56.2	476	2	US-10-428-041-13	Sequence 13, Appl	767	27	56.2	1059	2	US-09-800-792A-17	Sequence 217, App
695	27	56.2	476	2	US-10-428-041-14	Sequence 14, Appl	768	27	56.2	1068	2	US-09-248-796A-16119	Sequence 16119, App
696	27	56.2	478	2	US-09-675-018B-6	Sequence 6, Appl1	769	27	56.2	1090	2	US-09-085-199B-5	Sequence 5, Appl1
697	27	56.2	478	2	US-10-428-041-6	Sequence 6, Appl1	770	27	56.2	1243	2	US-09-198-452A-704	Sequence 704, App
698	27	56.2	480	2	US-09-270-767-43945	Sequence 43945, A	771	27	56.2	1253	2	US-09-438-189A-668	Sequence 668, App
699	27	56.2	501	2	US-09-270-767-41177	Sequence 41177, A	772	27	56.2	1257	2	US-09-252-991A-17290	Sequence 17290, A
700	27	56.2	501	2	US-09-270-767-56393	Sequence 56393, A	773	27	56.2	1260	2	US-09-543-681A-6174	Sequence 6174, Ap
701	27	56.2	504	2	US-09-270-767-46764	Sequence 46764, A	774	27	56.2	1282	2	US-09-489-039A-9644	Sequence 9644, Ap
702	27	56.2	504	2	US-09-949-016-11605	Sequence 11605, A	775	27	56.2	1365	6	US-09-376-330-18	Sequence 18, Appl
703	27	56.2	511	2	US-09-917-265A-67	Sequence 67, Appl	776	27	56.2	1365	6	5194600-4	Patent No. 5194600
704	27	56.2	515	2	US-09-543-681A-8280	Sequence 8280, Ap	777	27	56.2	1479	2	US-08-840-062-2	Sequence 2, Appl1
705	27	56.2	516	2	US-09-201-641-6	Sequence 6, Appl1	778	27	56.2	1479	2	US-08-840-062-4	Sequence 4, Appl1
706	27	56.2	516	2	US-09-323-998E-54	Sequence 54, Appl	779	27	56.2	1591	2	US-09-270-767-45698	Sequence 45698, A
707	27	56.2	519	2	US-09-489-039A-7785	Sequence 7785, Ap	780	27	56.2	1626	2	US-09-252-991A-23805	Sequence 23805, A
708	27	56.2	524	1	US-08-624-125-2	Sequence 2, Appl1	781	27	56.2	2161	2	US-09-081-320-3	Sequence 3, Appl1
709	27	56.2	524	1	US-08-624-125-21	Sequence 21, Appl	782	27	56.2	2161	2	US-09-574-141A-3	Sequence 3, Appl1
710	27	56.2	524	2	US-08-937-155-2	Sequence 2, Appl1	783	27	56.2	2161	2	US-09-707-780-3	Sequence 3, Appl1
711	27	56.2	524	2	US-08-937-155-21	Sequence 21, Appl	784	27	56.2	2161	2	US-09-568-189A-3	Sequence 3, Appl1
712	27	56.2	524	2	US-09-323-998E-2	Sequence 2, Appl1	785	27	56.2	2296	1	US-08-286-819A-27	Sequence 27, Appl
713	27	56.2	524	2	US-09-323-998E-21	Sequence 21, Appl	786	27	56.2	2296	2	US-08-980-357-27	Sequence 27, Appl
714	27	56.2	524	2	US-09-323-998E-49	Sequence 49, Appl	787	27	56.2	2296	2	US-09-357-375-27	Sequence 27, Appl
715	27	56.2	529	2	US-09-323-998E-23	Sequence 23, Appl	788	27	56.2	2476	2	US-08-276-967-2	Sequence 2, Appl1
716	27	56.2	529	2	US-09-323-998E-47	Sequence 47, Appl	789	27	56.2	3080	6	5223423-4	Patent No. 5223423
717	27	56.2	529	2	US-09-323-998E-50	Sequence 50, Appl	790	27	56.2	3080	6	US-08-061-376-5	Sequence 5, Appl1
718	27	56.2	529	2	US-09-323-998E-51	Sequence 51, Appl	791	27	56.2	3969	2	US-09-538-092-1662	Sequence 1262, Ap
719	27	56.2	533	2	US-09-323-998E-52	Sequence 52, Appl	792	27	56.2	4536	2	US-09-180-422B-27	Sequence 27, Appl1
720	27	56.2	533	2	US-09-917-265A-62	Sequence 62, Appl	793	27	56.2	4536	2	US-09-079-030-1	Sequence 1, Appl1
721	27	56.2	565	2	US-09-248-796A-15341	Sequence 15341, A	794	27	56.2	4563	2	US-09-108-006C-1	Sequence 1, Appl1
722	27	56.2	583	1	US-08-616-392C-4	Sequence 4, Appl1	795	27	56.2	4563	2	US-09-538-092-842	Sequence 842, App
723	27	56.2	601	2	US-09-949-016-10457	Sequence 10457, A	796	27	56.2	1339	2	US-09-270-767-40088	Sequence 40088, A
724	27	56.2	609	2	US-09-328-352-8168	Sequence 8168, Ap	797	27	56.2	1339	2	US-09-270-767-55304	Sequence 55304, A
725	27	56.2	610	1	US-08-974-565C-9	Sequence 9, Appl1	798	27	56.2	146	2	US-09-710-279-576	Sequence 576, App
726	27	56.2	610	1	US-08-942-521B-7	Sequence 7, Appl1	799	27	56.2	246	2	US-09-328-352-7569	Sequence 7569, App
727	27	56.2	610	2	US-09-255-748-9	Sequence 9, Appl1	800	27	55.2	260	2	US-09-134-001C-4507	Sequence 4507, Ap
728	27	56.2	611	2	US-09-662-254B-19	Sequence 19, Appl	801	26.5	55.2	494	2	US-09-543-681A-4773	Sequence 4773, Ap
729	27	56.2	638	1	US-07-688-352C-22	Sequence 22, Appl	802	26	55.2	8	4	PCT-US94-14106-33	Sequence 33, Appl
730	27	56.2	652	2	US-09-110-116-1	Sequence 1, Appl1	803	26	55.2	9	2	US-09-518-737-10	Sequence 10, Appl
731	27	56.2	652	2	US-08-956-322-2	Sequence 2, Appl1	804	26	55.2	10	2	US-08-671-094B-10	Sequence 24, Appl
732	27	56.2	667	2	US-09-248-796A-19663	Sequence 19663, A	805	26	54.2	20	2	US-08-075-541D-49	Sequence 49, Appl
733	27	56.2	686	2	US-08-942-521B-9	Sequence 9, Appl1	806	26	54.2	20	2	PCT-US91-02942-29	Sequence 29, Appl
734	27	56.2	725	2	US-09-724-653-10	Sequence 10, Appl	807	26	54.2	21	4	US-09-749-637A-394	Sequence 39, App
735	27	56.2	734	2	US-09-446-249A-85	Sequence 85, Appl	808	26	55.2	27	2	US-08-525-535A-17	Sequence 17, Appl
736	27	56.2	734	2	US-08-406-188B-85	Sequence 85, Appl	809	26	55.2	34	2	US-09-673-395A-170	Sequence 370, App
737	27	56.2	759	2	US-09-248-796A-16440	Sequence 16440, A	810	26	55.2	41	2	US-10-296-317-40	Sequence 40, Appl
738	27	56.2	797	1	US-08-663-566A-2	Sequence 2, Appl1	811	26	54.2	41	2	US-09-036-315-25	Sequence 25, Appl
739	27	56.2	797	1	US-08-923-610-2	Sequence 2, Appl1	812	26	54.2	46	2	US-09-680-121C-25	Sequence 25, Appl
740	27	56.2	797	1	US-08-288-065A-2	Sequence 2, Appl1	813	26	54.2	46	2	US-09-270-767-34458	Sequence 34458, A
741	27	56.2	797	1	US-08-662-240A-2	Sequence 2, Appl1	814	26	55.2	50	2	US-09-270-767-45675	Sequence 45675, A
742	27	56.2	810	4	PCT-US95-10245-2	Sequence 2, Appl1	815	26	55.2	50	2	US-09-270-767-57499	Sequence 75499, A
743	27	56.2	810	4	US-09-538-092-1275	Sequence 1275, Ap	816	26	55.2	58	2	US-09-513-999C-4170	Sequence 4170, Ap
744	27	56.2	862	2	US-09-115-861-2	Sequence 2, Appl1	817	26	54.2	58	2	US-09-471-276-1242	Sequence 1242, Ap
745	27	56.2	862	2	US-09-398-395A-44	Sequence 44, Appl	818	26	54.2	58	2	US-09-134-000C-6501	Sequence 6501, Ap
746	27	56.2	862	2	US-09-887-586A-44	Sequence 44, Appl	819	26	54.2	64	2	US-09-248-796A-23795	Sequence 23795, A
747	27	56.2	862	2	US-09-895-752-44	Sequence 44, Appl	820	26	55.2	69	2	US-09-248-796A-24187	Sequence 24187, A
748	27	56.2	862	2	US-09-903-012B-44	Sequence 44, Appl	821	26	55.2	69	2	US-09-513-999C-6948	Sequence 6948, Ap
749	27	56.2	862	2	US-09-953-253-2	Sequence 2, Appl1	822	26	54.2	73	2	US-09-248-796A-23767	Sequence 23767, A
750	27	56.2	862	2	US-09-900-797-44	Sequence 44, Appl	823	26	54.2	77	2	US-09-513-999C-6446	Sequence 6446, Ap
751	27	56.2	862	2	US-09-893-820-44	Sequence 44, Appl	824	26	54.2	77	2	US-09-248-796A-23894	Sequence 23894, A
752	27	56.2	862	2	US-10-041-007-41	Sequence 41, Appl	825	26	54.2	81	2	US-09-270-767-33026	Sequence 33026, A
753	27	56.2	877	2	US-09-252-991A-25547	Sequence 25547, A	826	26	54.2	81	2	US-09-270-767-48243	Sequence 48243, A
754	27	56.2	885	1	US-08-577-492-33	Sequence 33, Appl	827	26	55.2	82	2	US-09-713-999C-7535	Sequence 7535, Ap
755	27	56.2	885	1	US-09-079-630-33	Sequence 33, Appl	828	26	54.2	86	2	US-09-270-767-39113	Sequence 39113, A
756	27	56.2	886	1	US-08-474-379C-65	Sequence 65, Appl	829	26	54.2	86	2	US-09-270-767-54330	Sequence 54330, A
757	27	56.2	886	2	US-09-146-249A-65	Sequence 65, Appl	830	26	54.2	86	2		

831	26	54.2	89	2	US-09-469-039A-10366	Sequence 10366, A	904	26	54.2	125	1	US-08-331-397B-67	Sequence 67, Appl
832	26	54.2	93	2	US-09-270-767-33985	Sequence 33985, A	905	26	54.2	125	1	US-08-759-804A-66	Sequence 66, Appl
833	26	54.2	93	2	US-09-270-767-49202	Sequence 49202, A	906	26	54.2	126	1	US-08-675-508-20	Sequence 20, Appl
834	26	54.2	94	2	US-09-732-210-141	Sequence 141, App	907	26	54.2	131	1	US-08-053-171-5	Sequence 5, Appl
835	26	54.2	95	1	US-08-341-219-2	Sequence 2, Appl	908	26	54.2	131	1	US-08-053-171-9	Sequence 9, Appl
836	26	54.2	95	2	US-08-912-314A-2	Sequence 26, Appl	909	26	54.2	131	1	US-08-129-930B-95	Sequence 95, Appl
837	26	54.2	100	2	US-09-840-459-26	Sequence 26, Appl	910	26	54.2	131	2	US-08-134-346A-50	Sequence 50, Appl
838	26	54.2	100	2	US-09-497-625A-26	Sequence 26, Appl	911	26	54.2	132	1	US-08-976-288A-95	Sequence 95, Appl
839	26	54.2	100	2	US-09-497-625A-28	Sequence 28, Appl	912	26	54.2	132	1	US-08-477-877B-84	Sequence 84, Appl
840	26	54.2	100	2	US-09-497-625A-28	Sequence 28, Appl	913	26	54.2	132	1	US-08-472-281A-91	Sequence 91, Appl
841	26	54.2	110	2	US-10-114-716A-42	Sequence 42, Appl	914	26	54.2	132	1	US-08-472-281A-91	Sequence 91, Appl
842	26	54.2	110	2	US-07-942-245-25	Sequence 25, Appl	915	26	54.2	132	1	US-08-477-989B-91	Sequence 91, Appl
843	26	54.2	111	1	US-07-942-245-27	Sequence 27, Appl	916	26	54.2	132	1	US-08-477-989B-91	Sequence 91, Appl
844	26	54.2	111	1	US-07-942-245-29	Sequence 29, Appl	917	26	54.2	132	1	US-09-662-140D-92	Sequence 92, Appl
845	26	54.2	111	1	US-07-942-245-31	Sequence 31, Appl	918	26	54.2	132	2	US-09-662-140D-92	Sequence 92, Appl
846	26	54.2	112	1	US-08-053-171-15	Sequence 15, Appl	919	26	54.2	137	2	US-09-328-352-6431	Sequence 34297, A
847	26	54.2	112	1	US-08-331-398A-48	Sequence 48, Appl	920	26	54.2	139	2	US-09-270-767-49514	Sequence 49514, A
848	26	54.2	112	1	US-08-331-398A-50	Sequence 50, Appl	921	26	54.2	139	2	US-08-708-541A-32	Sequence 32, Appl
849	26	54.2	112	1	US-08-477-877B-87	Sequence 87, Appl	922	26	54.2	145	2	US-08-147-771-32	Sequence 32, Appl
850	26	54.2	112	1	US-08-477-877B-88	Sequence 88, Appl	923	26	54.2	145	2	US-08-752-844-2	Sequence 2, Appl
851	26	54.2	112	1	US-08-077-252B-3	Sequence 3, Appl	924	26	54.2	149	1	US-08-591-196-2	Sequence 2, Appl
852	26	54.2	112	1	US-08-388-672A-21	Sequence 21, Appl	925	26	54.2	149	2	US-09-192-838B-2	Sequence 2, Appl
853	26	54.2	112	1	US-08-388-672A-25	Sequence 25, Appl	926	26	54.2	149	2	US-09-293-533-2	Sequence 2, Appl
854	26	54.2	112	1	US-08-472-281A-87	Sequence 87, Appl	927	26	54.2	149	2	US-09-324-191-2	Sequence 2, Appl
855	26	54.2	112	1	US-08-472-281A-88	Sequence 88, Appl	928	26	54.2	149	2	US-09-621-976-4852	Sequence 4852, Ap
856	26	54.2	112	1	US-08-859-649-19	Sequence 19, Appl	929	26	54.2	152	2	US-09-270-767-37814	Sequence 37814, A
857	26	54.2	112	1	US-08-859-649-25	Sequence 25, Appl	930	26	54.2	152	2	US-09-270-767-53031	Sequence 53031, A
858	26	54.2	112	1	US-08-859-649-33	Sequence 33, Appl	931	26	54.2	153	2	US-09-328-352-4170	Sequence 4170, Ap
859	26	54.2	112	1	US-08-859-649-49	Sequence 49, Appl	932	26	54.2	154	2	US-09-640-211A-962	Sequence 962, App
860	26	54.2	112	1	US-08-752-844-15	Sequence 15, Appl	933	26	54.2	154	2	US-09-328-352-6921	Sequence 6921, Ap
861	26	54.2	112	1	US-08-477-989B-88	Sequence 88, Appl	934	26	54.2	168	2	US-09-489-039A-10847	Sequence 10847, A
862	26	54.2	112	1	US-08-888-366-16	Sequence 16, Appl	935	26	54.2	168	2	US-09-902-540-11065	Sequence 11065, A
863	26	54.2	112	1	US-08-591-196-15	Sequence 15, Appl	936	26	54.2	173	2	US-09-902-540-11065	Sequence 22808, A
864	26	54.2	112	1	US-08-331-397B-48	Sequence 48, Appl	937	26	54.2	197	2	US-09-248-796A-22808	Sequence 20, Appl
865	26	54.2	112	1	US-08-331-397B-50	Sequence 50, Appl	938	26	54.2	199	2	US-09-484-577A-20	Sequence 36070, A
866	26	54.2	112	1	US-08-759-804A-48	Sequence 48, Appl	939	26	54.2	205	2	US-09-270-767-56070	Sequence 51287, A
867	26	54.2	112	1	US-08-759-804A-50	Sequence 50, Appl	940	26	54.2	205	2	US-09-270-767-58827	Sequence 58827, A
868	26	54.2	112	1	US-09-080-554-25	Sequence 25, Appl	941	26	54.2	206	2	US-09-904-615-164	Sequence 164, App
869	26	54.2	112	2	US-09-184-658-49	Sequence 49, Appl	942	26	54.2	209	2	US-10-054-988-164	Sequence 164, App
870	26	54.2	112	2	US-08-815-190A-14	Sequence 14, Appl	943	26	54.2	209	2	US-09-690-454-69	Sequence 56833, A
871	26	54.2	112	2	US-09-002-753A-3	Sequence 3, Appl	944	26	54.2	216	2	US-09-270-767-56833	Sequence 65, Appl
872	26	54.2	112	2	US-09-227-693-48	Sequence 48, Appl	945	26	54.2	216	2	US-08-818-112-65	Sequence 65, Appl
873	26	54.2	112	2	US-09-227-693-50	Sequence 50, Appl	946	26	54.2	230	2	US-08-818-111-66	Sequence 66, Appl
874	26	54.2	112	2	US-08-207-861-19	Sequence 19, Appl	947	26	54.2	230	2	US-09-056-556-65	Sequence 65, Appl
875	26	54.2	112	2	US-08-207-861-25	Sequence 25, Appl	948	26	54.2	230	2	US-09-072-596-66	Sequence 66, Appl
876	26	54.2	112	2	US-08-207-861-25	Sequence 25, Appl	949	26	54.2	230	2	US-09-072-596-66	Sequence 66, Appl
877	26	54.2	112	2	US-08-207-861-25	Sequence 25, Appl	950	26	54.2	230	2	US-10-193-002-66	Sequence 65, Appl
878	26	54.2	112	2	US-08-207-861-33	Sequence 33, Appl	951	26	54.2	230	2	US-10-084-843-65	Sequence 65, Appl
879	26	54.2	112	2	US-08-859-648-19	Sequence 19, Appl	952	26	54.2	230	2	US-09-192-545-4	Sequence 20411, A
880	26	54.2	112	2	US-08-859-648-25	Sequence 25, Appl	953	26	54.2	238	2	US-09-252-991A-20411	Sequence 42222, A
881	26	54.2	112	2	US-08-859-648-25	Sequence 25, Appl	954	26	54.2	241	2	US-09-270-767-41222	Sequence 34, Appl
882	26	54.2	112	2	US-08-859-648-33	Sequence 33, Appl	955	26	54.2	246	2	US-08-331-398A-34	Sequence 34, Appl
883	26	54.2	112	2	US-09-657-274-3	Sequence 3, Appl	956	26	54.2	247	2	US-08-331-398A-34	Sequence 34, Appl
884	26	54.2	112	2	US-09-504-262D-49	Sequence 49, Appl	957	26	54.2	248	1	US-08-759-804A-34	Sequence 34, Appl
885	26	54.2	112	2	US-09-840-459-69	Sequence 69, Appl	958	26	54.2	248	1	US-08-759-804A-34	Sequence 34, Appl
886	26	54.2	112	2	US-09-497-625A-69	Sequence 69, Appl	959	26	54.2	248	1	US-09-726-219A-190	Sequence 190, App
887	26	54.2	112	2	US-09-497-625A-69	Sequence 69, Appl	960	26	54.2	249	2	US-09-196-552-10313	Sequence 15562, A
888	26	54.2	112	2	US-09-462-140D-95	Sequence 95, Appl	961	26	54.2	250	2	US-09-949-016-10313	Sequence 9, Appl
889	26	54.2	112	2	US-09-462-140D-95	Sequence 95, Appl	962	26	54.2	263	2	US-08-928-329-9	Sequence 3779, Ap
890	26	54.2	112	4	PCR-US94-06687-3	Sequence 3, Appl	963	26	54.2	263	2	US-10-603-280-3	Sequence 3, Appl
891	26	54.2	113	2	US-09-232-290-15	Sequence 15, Appl	964	26	54.2	266	2	US-08-557-128-4	Sequence 36, Appl
892	26	54.2	113	2	US-09-232-290-25	Sequence 25, Appl	965	26	54.2	267	2	US-09-242-690A-36	Sequence 106, App
893	26	54.2	114	1	US-08-285-936-4	Sequence 4, Appl	966	26	54.2	267	2	US-09-302-620B-106	Sequence 36, Appl
894	26	54.2	114	1	US-08-285-936-4	Sequence 4, Appl	967	26	54.2	267	2	US-09-908-855-16	Sequence 67, Appl
895	26	54.2	114	1	US-08-080-554-21	Sequence 21, Appl	968	26	54.2	267	2	US-09-911-781-24	Sequence 24, Appl
896	26	54.2	117	2	US-09-270-767-32183	Sequence 32183, A	969	26	54.2	267	2		
897	26	54.2	118	2	US-09-311-021-106	Sequence 106, App	970	26	54.2	267	2		
898	26	54.2	119	2	US-09-902-540-10567	Sequence 10567, A	971	26	54.2	267	2		
899	26	54.2	121	2	US-09-036-315-7	Sequence 7, Appl	972	26	54.2	267	2		
900	26	54.2	121	2	US-09-680-121C-7	Sequence 7, Appl	973	26	54.2	267	2		
901	26	54.2	122	2	US-09-248-796A-17936	Sequence 17936, A	974	26	54.2	267	2		
902	26	54.2	124	2	US-09-328-352-6305	Sequence 6305, Ap	975	26	54.2	267	2		
903	26	54.2	125	1	US-08-331-398A-67	Sequence 67, Appl	976	26	54.2	267	2		


```
977 26 54.2 267 2 US-10-400-902-24 Sequence 24, Appl
978 26 54.2 267 6 5204252-2 Patent No. 5204252
979 26 54.2 268 2 US-09-328-352-6129 Sequence 6129, Ap
980 26 54.2 268 6 5204252-4 Patent No. 5204252
981 26 54.2 271 1 US-08-117-083-14 Sequence 14, Appl
982 26 54.2 273 2 US-09-270-767-46936 Sequence 46936, A
983 26 54.2 276 2 US-09-489-039A-13894 Sequence 13894, A
984 26 54.2 277 2 US-09-270-767-61428 Sequence 61428, A
985 26 54.2 281 2 US-09-602-787A-130 Sequence 130, App
986 26 54.2 284 2 US-09-489-039A-8653 Sequence 8653, Ap
987 26 54.2 284 2 US-09-270-767-38774 Sequence 38774, A
988 26 54.2 284 2 US-09-270-767-53991 Sequence 53991, A
989 26 54.2 286 2 US-09-902-540-15361 Sequence 15361, A
990 26 54.2 287 1 US-07-915-934-2 Sequence 2, Appl1
991 26 54.2 287 1 US-08-325-743-2 Sequence 2891, Ap
992 26 54.2 287 2 US-10-104-047-2891 Sequence 63, Appl
993 26 54.2 289 2 US-09-184-658-63 Sequence 63, Appl
994 26 54.2 289 2 US-09-504-262D-63 Sequence 60014, A
995 26 54.2 290 2 US-09-270-767-60014 Sequence 60014, A
996 26 54.2 294 2 US-09-949-016-6097 Sequence 6097, Ap
997 26 54.2 295 1 US-08-679-765-5 Sequence 5, Appl1
998 26 54.2 295 1 US-09-196-525-5 Sequence 5, Appl1
999 26 54.2 295 1 US-09-318-317-5 Sequence 22, Appl
1000 26 54.2 295 2 US-09-177-165A-22 Sequence 22, Appl
```

ALIGNMENTS

```
RESULT 1
US-09-574-749B-41
; Sequence 41, Application US/09574749B
; Patent No. 6548299
; GENERAL INFORMATION:
; APPLICANT: ROSENZWEIG, Michael
; APPLICANT: PRKETT, Mark J.
; APPLICANT: SCADEN, David T.
; APPLICANT: POZNANSKY, Mark C.
; TITLE OF INVENTION: LYMPHOID TISSUE-SPECIFIC CELL PRODUCTION
; TITLE OF INVENTION: FROM HEMATOPOIETIC PROGENITOR CELLS IN THREE-DIMENSIONAL
; TITLE OF INVENTION: DEVICES
; FILE REFERENCE: C1005/7012/KA/ERG
; CURRENT APPLICATION NUMBER: US/09/574, 749B
; CURRENT FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: US 60/107, 972
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: PCT/US99/26795
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: US 09/524, 749
; PRIOR FILING DATE: 2000-05-18
; NUMBER OF SEQ ID NOS: 58
; SOFTWARE: FaastSeq for Windows Version 3.0
; SEQ ID NO 41
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Papilloma source
US-09-574-749B-41

Query Match 100.0%; Score 48; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4,6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365, 908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891, 823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214, 202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-17

Query Match 100.0%; Score 48; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RLCVOSTHV 9
Db 2 RLCVOSTHV 10

RESULT 3
US-08-075-541D-48
; Sequence 48, Application US/08075541D
; Patent No. 6183745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/075,541D
; FILING DATE: 10-JUN-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: AU Pk 3876
; FILING DATE: 12-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/au91/00575
; FILING DATE: 12-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: NADEL, ALAN S
; REGISTRATION NUMBER: 27,363
; REFERENCE/DOCKET NUMBER: 8795-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-567-2991
; TELEFAX: 215-567-2991
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:
```


LENGTH: 17 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-48

Query Match 100.0%; Score 48; DB 2; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.008;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 4 RLCVOSTHV 12

RESULT 4
US-08-075-541D-39
Sequence 39, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075.541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2920
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-39

Query Match 100.0%; Score 48; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.009;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 5 RLCVOSTHV 13

RESULT 5
US-09-000-003A-8
Sequence 8, Application US/09000003A
Patent No. 6652850
GENERAL INFORMATION:
APPLICANT: Phillip, Ramila
TITLE OF INVENTION: ADENO-ASSOCIATED VIRAL LIPOSOMES AND
THEIR USE IN TRANSFECTING DENDRITIC CELLS TO STIMULATE
SPECIFIC IMMUNITY
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Alexis Barron, Esq.
STREET: Suite 2600 Aramark Tower, 1101 Market Street
CITY: Philadelphia
STATE: PA
COUNTRY: United States of America
ZIP: 19107
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/000.003A
FILING DATE: 15-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/12012
FILING DATE: 19-JUL-1996
APPLICATION NUMBER: US 60/001,312
FILING DATE: 21-JUL-1995
APPLICATION NUMBER: US 60/007,184
FILING DATE: 01-NOV-1995
APPLICATION NUMBER: US 08/566,286
FILING DATE: 01-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: Barron, Alexis
REGISTRATION NUMBER: 22,702
REFERENCE/DOCKET NUMBER: 20,846-K USA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 923-4466
TELEFAX: (215) 923-2189
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: internal
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-000-003A-8

Query Match 100.0%; Score 48; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.009;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 7 RLCVOSTHV 15

RESULT 6
US-09-405-986A-9
Sequence 9, Application US/09405986A
Patent No. 6676946
GENERAL INFORMATION:
APPLICANT: Bay, Sylvie
APPLICANT: Cantacuzene, Daniele
APPLICANT: Leclerc, Claude
APPLICANT: Lo-Man, Richard
TITLE OF INVENTION: MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,

;; TITLE OF INVENTION: VACCINE COMPRISING THE SAME AND USE THEREOF
;; FILE REFERENCE: 102.166A-1
;; CURRENT APPLICATION NUMBER: US/09/405,986A
;; CURRENT FILING DATE: 2002-06-11
;; PRIOR APPLICATION NUMBER: US 09/049,847
;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: US 60/041,726
;; PRIOR FILING DATE: 1997-03-27
;; NUMBER OF SEQ ID NOS: 25
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 9
;; LENGTH: 19
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
;; FEATURE:
;; NAME/KEY: MISC FEATURE
;; OTHER INFORMATION: HPV 16 E7 PEPTIDE
US-09-405-986A-9

Query Match 100.0%; Score 48; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.009;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 7 RLCVOSTHV 15

RESULT 7
US-09-828-645-4
;; Sequence 4, Application US/09828645
;; Patent No. 6743593
;; GENERAL INFORMATION:
;; APPLICANT: Hu, Yao Xiong
;; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
;; FILE REFERENCE: 146-1-002
;; CURRENT FILING DATE: 2001-04-05
;; PRIOR APPLICATION NUMBER: US 60/194,796
;; PRIOR FILING DATE: 2000-04-05
;; NUMBER OF SEQ ID NOS: 8
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 4
;; LENGTH: 20
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-4

Query Match 100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0095;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 6 RLCVOSTHV 14

RESULT 8
US-09-980-177A-74
;; Sequence 74, Application US/09980177A
;; Patent No. 6838084
;; GENERAL INFORMATION:
;; APPLICANT: Jochemus, Ingrid
;; APPLICANT: Nieland, John
;; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
;; TITLE OF INVENTION: Papilloma Virus LI-Protein and Use Thereof in Diagnosis and
;; FILE REFERENCE: 50125/036001
;; CURRENT APPLICATION NUMBER: US/09/980,177A
;; CURRENT FILING DATE: 2001-11-29
;; PRIOR APPLICATION NUMBER: PCT/EP00/05006

;; PRIOR FILING DATE: 2000-05-31
;; PRIOR APPLICATION NUMBER: DE 19925199.1
;; PRIOR FILING DATE: 1999-06-01
;; NUMBER OF SEQ ID NOS: 77
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 74
;; LENGTH: 20
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 16
US-09-980-177A-74

Query Match 100.0%; Score 48; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0095;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 11 RLCVOSTHV 19

RESULT 9
US-08-934-915-49
;; Sequence 49, Application US/08934915
;; Patent No. 5932412
;; GENERAL INFORMATION:
;; APPLICANT: DILLNER, JOAKIM
;; APPLICANT: DILLNER, LENA
;; APPLICANT: CHENG, HWEI-MING
;; TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
;; TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
;; TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
;; TITLE OF INVENTION: USEFUL IN IMMUNOSSAY FOR
;; TITLE OF INVENTION: DIAGNOSTIC PURPOSES
;; NUMBER OF SEQUENCES: 193
;; CORRESPONDENCE ADDRESSES:
;; ADDRESSEE: MASON & ASSOCIATES, P.A.
;; STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
;; CITY: CLEARWATER
;; STATE: FLORIDA
;; COUNTRY: U.S.A.
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: Windows 3.0
;; SOFTWARE: Microsoft Word 6.0
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/934,915
;; FILING DATE: 22-SEP-1997
;; CLASSIFICATION: 435
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 07/949,836
;; FILING DATE:
;; ATTORNEY/AGENT INFORMATION:
;; NAME: LOUISE A. FOUTCH
;; REGISTRATION NUMBER: 37,133
;; REFERENCE/DOCKET NUMBER: 1946.6
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 813-538-3800
;; TELEFAX: 813-538-3820
;; TELEX:
;; INFORMATION FOR SEQ ID NO: 49:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 21 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
US-08-934-915-49

Query Match 100.0%; Score 48; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.01;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9

Db 5 RLCVOSTHV 13

RESULT 10
US-08-934-915-156
Sequence 156, Application US/08934915
Patent No. 5932412

GENERAL INFORMATION:

APPLICANT: DILLNER, JOAKIM

APPLICANT: DILLNER, LENA

APPLICANT: CHENG, HWEI-MING

TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN

TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,

TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,

TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR

TITLE OF INVENTION: DIAGNOSTIC PURPOSES

NUMBER OF SEQUENCES: 193

CORRESPONDENCE ADDRESS:

ADDRESSEE: MASON & ASSOCIATES, P.A.

STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500

CITY: CLEARWATER

STATE: FLORIDA

COUNTRY: U.S.A.

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: Windows 3.0

SOFTWARE: Microsoft Word 6.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/934,915

FILING DATE: 22-SEP-1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/949,836

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: LOUISE A. Foulch

REGISTRATION NUMBER: 37,133

REFERENCE/DOCKET NUMBER: 1946.6

TELECOMMUNICATION INFORMATION:

TELEPHONE: 813-538-3800

TELEFAX: 813-538-3820

TELEX:

INFORMATION FOR SEQ ID NO: 156:

SEQUENCE CHARACTERISTICS:

LENGTH: 21 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-934-915-156

Query Match 100.0%; Score 48; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 0.01;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9

Db 5 RLCVOSTHV 13

RESULT 11

US-08-075-541D-47

Sequence 47, Application US/08075541D

Patent No. 6183745

GENERAL INFORMATION:

APPLICANT: TINDLE, ROBERT

APPLICANT: PERAZZO, GERMALIN

APPLICANT: PRAZER, IAN

TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND

TITLE OF INVENTION: PEPTIDES FOR USE THEREIN

NUMBER OF SEQUENCES: 56

CORRESPONDENCE ADDRESS:

ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.

STREET: 1601 MARKET STREET, 36TH FLOOR

CITY: PHILADELPHIA

STATE: PENNSYLVANIA

COUNTRY: USA

ZIP: 19103-2398

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/075,541D

FILING DATE: 10-JUN-1993

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: AU pk 3876

FILING DATE: 12-DEC-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: pct/au91/00575

FILING DATE: 12-DEC-1991

ATTORNEY/AGENT INFORMATION:

NAME: NADEL, ALAN S

REGISTRATION NUMBER: 27,363

REFERENCE/DOCKET NUMBER: 8795-4

TELECOMMUNICATION INFORMATION:

TELEPHONE: 215-567-2020

INFORMATION FOR SEQ ID NO: 47:

SEQUENCE CHARACTERISTICS:

LENGTH: 25 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-075-541D-47

Query Match 100.0%; Score 48; DB 2; Length 25;

Best Local Similarity 100.0%; Pred. No. 0.012;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9

Db 17 RLCVOSTHV 25

RESULT 12

US-08-934-915-53

Sequence 53, Application US/08934915

Patent No. 5932412

GENERAL INFORMATION:

APPLICANT: DILLNER, JOAKIM

APPLICANT: DILLNER, LENA

APPLICANT: CHENG, HWEI-MING

TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN

TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,

TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,

TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR

TITLE OF INVENTION: DIAGNOSTIC PURPOSES

NUMBER OF SEQUENCES: 193

CORRESPONDENCE ADDRESS:

ADDRESSEE: MASON & ASSOCIATES, P.A.

STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500

CITY: CLEARWATER

STATE: FLORIDA

COUNTRY: U.S.A.

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: Windows 3.0

SOFTWARE: Microsoft Word 6.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/934,915

```

; FILING DATE: 22-SEP-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA: 07/949,836
; APPLICATION NUMBER: 07/949,836
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LOUISE A. FOUTCH
; REGISTRATION NUMBER: 37,133
; REFERENCE/DOCKET NUMBER: 1946.6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 813-538-3800
; TELEFAX: 813-538-3820
;
; TELETYPE:
; INFORMATION FOR SEQ ID NO: 53:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-08-934-915-53

Query Match          100.0%; Score 48; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 9 RLCVOSTHV 17

RESULT 13
US-09-486-394-4
; Sequence 4, Application US/09486394
; Patent No. 6478749
; GENERAL INFORMATION:
; APPLICANT: HOPEL, Reinhard
; TITLE OF INVENTION: Diagnostic Kit for Skin Tears, and Method
; FILE REFERENCE: 032929-001
; CURRENT APPLICATION NUMBER: US/09/486,394
; CURRENT FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/04773
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: DE 197 37 409.3
; PRIOR FILING DATE: 1997-08-27
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (1)..(30)
; OTHER INFORMATION: E7 peptide.
;
US-09-486-394-4

Query Match          100.0%; Score 48; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 6 RLCVOSTHV 14

RESULT 14
US-08-406-248-6
; Sequence 6, Application US/08406248
; Patent No. 5736318
; GENERAL INFORMATION:
; APPLICANT: Munger, Karl
; APPLICANT: Jones, D. Leanne
; TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
```

```

; TITLE OF INVENTION: TRANSFORMED CELLS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/406,248
; FILING DATE:
; CLASSIFICATION: 436
; ATTORNEY/AGENT INFORMATION:
; NAME: McDaniels, Patricia A.
; REGISTRATION NUMBER: 33,194
; REFERENCE/DOCKET NUMBER: HAZ-011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
;
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-406-248-6

Query Match          100.0%; Score 48; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 15
US-08-075-541D-42
; Sequence 42, Application US/08075541D
; Patent No. 6183745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/075,541D
; FILING DATE: 10-JUN-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: AU PK 3876
; FILING DATE: 12-DEC-1990
; PRIOR APPLICATION DATA:
```

APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2391
INFORMATION FOR SEQ ID NO: 42:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-42

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
Db 66 RLCVQSTHV 74

RESULT 16
US-09-382-616A-1
Sequence 1, Application US/09382616A
Patent No. 6200746
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Manxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/382,616A
CURRENT FILING DATE: 1999-08-25
PRIORITY APPLICATION NUMBER: 09/382,616
PRIORITY FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-382-616A-1

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
Db 66 RLCVQSTHV 74

RESULT 17
US-08-944-368A-4
Sequence 4, Application US/08944368A
Patent No. 6228368
GENERAL INFORMATION:
APPLICANT: Gissman, et al.
TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine
TITLE OF INVENTION: Formulations and Methods of Use
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESS: Borun
STREET: 233 South Wacker Drive, 6300 Sears Tower
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America

ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/944,368A
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27013/34028
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-944-368A-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
Db 66 RLCVQSTHV 74

RESULT 18
US-09-820-764-4
Sequence 4, Application US/09820764
Patent No. 6352696
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,764
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5300
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids

TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-764-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
Db 66 RLCVOSTHV 74

RESULT 19
US-09-613-303-8
Sequence 8, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
COUNTRY: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
Db 66 RLCVOSTHV 74

RESULT 20
US-09-566-420-19
Sequence 19, Application US/09566420
Patent No. 6500641
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/09/566,420
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-09-566-420-19

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RLCVOSTHV 9
Db 66 RLCVOSTHV 74

RESULT 21
US-09-986-118A-4
Sequence 4, Application US/09986118A
Patent No. 6562351
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALLER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-NO. 6562351-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (1202) 672-5300
TELEFAX: (1202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
Db 66 RLCVOSTHV 74

RESULT 22
US-09-728-466-1
Sequence 1, Application US/09728466
Patent No. 6641994
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616

PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvlaagl
US-09-728-466-1

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RLCVOSTHV 9
|||
Db 66 RLCVOSTHV 74

RESULT 23

US-09-824-017-4
Sequence 4, Application US/09824017
Patent No. 6649167
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALBEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824.017
FILING DATE: 03-Apr-2001
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RLCVOSTHV 9
|||
Db 66 RLCVOSTHV 74

RESULT 24

US-10-267-311-8

Sequence 8, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RLCVOSTHV 9
|||
Db 66 RLCVOSTHV 74

RESULT 25

US-10-201-764-19
Sequence 19, Application US/10201764
Patent No. 6716623
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/201,764
CURRENT FILING DATE: 2002-07-22
PRIOR APPLICATION NUMBER: US/09/566,420
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RLCVOSTHV 9
|||
Db 66 RLCVOSTHV 74

RESULT 26

US-09-637-746-3
Sequence 3, Application US/09637746
Patent No. 6727079
GENERAL INFORMATION:

```

; APPLICANT: Thorgerirsson, Snorri S.
; APPLICANT: Woltsch, Joseph T.
; APPLICANT: Zhang, Minghuang
; TITLE OF INVENTION: CDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTEI
; FILE REFERENCE: 11613.29USM1
; CURRENT APPLICATION NUMBER: US/09/637,746
; CURRENT FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: PCT/US99/04142
; PRIOR FILING DATE: 1999-02-25
; PRIOR APPLICATION NUMBER: US 60/079,567
; PRIOR FILING DATE: 1998-03-27
; PRIOR FILING DATE: 1998-02-25
; PRIOR FILING DATE: 1998-02-25
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 3
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-09-637-746-3

```

```

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 RLCVOSTHV 9
        |||||
Db      66 RLCVOSTHV 74

```

```

RESULT 27
US-09-501-097A-7
; Sequence 7, Application US/09501097A
; Patent No. 6734173
; GENERAL INFORMATION:
; APPLICANT: Tzyy-Chouu Wu
; APPLICANT: Chien-Fu Hung
; TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
; FILE REFERENCE: 2240-169349
; CURRENT APPLICATION NUMBER: US/09/501,097A
; CURRENT FILING DATE: 2000-02-09
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 98
; TYPE: PRT
; ORGANISM: human papillomavirus
US-09-501-097A-7

```

```

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 RLCVOSTHV 9
        |||||
Db      66 RLCVOSTHV 74

```

```

RESULT 28
US-09-980-523A-12
; Sequence 12, Application US/09980523A
; Patent No. 6783763
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCIEN
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7
; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
; FILE REFERENCE: WO91 AO INS

```

```

; CURRENT APPLICATION NUMBER: US/09/980,523A
; CURRENT FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: PCT/FR00/01513
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: FR 99/07012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 12
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-09-980-523A-12

```

```

Query Match          100.0%; Score 48; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.052;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 RLCVOSTHV 9
        |||||
Db      66 RLCVOSTHV 74

```

```

RESULT 29
US-09-613-303-12
; Sequence 12, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-12

```

```

Query Match          100.0%; Score 48; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.065;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 RLCVOSTHV 9
        |||||
Db      89 RLCVOSTHV 97

```

```

RESULT 30
US-10-267-311-12
; Sequence 12, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55

```



```

; SOFTWARE: Fastseq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: prt
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
; OS-10-267-311-12

```

```

Query Match      100.0%; Score 48; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.065;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Qy	1	RLCVQSTHV	9
Db	89	RLCVQSTHV	97

```

RESULT 31
US-08-860-165-14
Sequence 14, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/30
CURRENT APPLICATION NUMBER: US/08/860.165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU P00157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 172
TYPE: PR1
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-14

```

Query Match	100.0%;	Score 48;	DB 2;	Length 172;
Best Local Similarity	100.0%;	Pred. No. 0.095;		
Matches	9;	Conservative	0;	Mismatches 0;
				Indels 0;
				Gaps 0;

QY	1 RLCTVQSTHV 9
Db	34 RLCTVQSTHV 42

```

RESULT 32
US-09-359-382-14
/ Sequence 14, Application US/09359382
/ Patent No. 6306397
/ GENERAL INFORMATION:
/ APPLICANT: EDWARDS, Stirling John
/ APPLICANT: COX, John Cooper
/ APPLICANT: WEBB, Elizabeth Ann
/ APPLICANT: FRAZER, Ian
/ TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
/ FILE REFERENCE: 017227/0148
/ CURRENT APPLICATION NUMBER: US/09/359,382
/ CURRENT FILING DATE: 1999-07-23
/ EARLIER APPLICATION NUMBER: US 08/860,165
/ EARLIER FILING DATE: 1997-09-22
/ EARLIER APPLICATION NUMBER: PCT/AU95/00868
/ EARLIER FILING DATE: 1995-12-20
/ EARLIER APPLICATION NUMBER: AU PNO157/94
/ EARLIER FILING DATE: 1994-12-20

```

```

; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-14

```

Query Match	100.0%;	Score 48;	DB 2;	Length 172;
Best Local Similarity	100.0%;	Pred. No. 0.035;		
Matches	9;	Conservative	0;	Indels 0;
		Mismatches	0;	Gaps 0;

```
QY      1 RLCVQSTHV 9
          |||||
Db      34 RLCVQSTHV 42
```

```

RESULT 33
US-09-462-993-2
; Sequence 2, Application US/09462993
; Patent No. 6884786
; GENERAL INFORMATION:
APPLICANT: KIENY, Marie-Paule
APPLICANT: BALLOUL, Jean-Marc
APPLICANT: BICOURENE, Nadine
TITLE OF INVENTION: ANTIDOTAL COMPOSITION BASED ON IMMUNOGENIC
TITLE OF INVENTION: POLYPEPTIDE WITH MODIFIED CELL LOCATION
FILE REFERENCE: 017753-122
CURRENT APPLICATION NUMBER: US/09/462,993
CURRENT FILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: PCT/FR98/01576
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: FR 97/09152
PRIOR FILING DATE: 1997-07-18
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn Ver. 2.2
SEQ ID NO 2
LENGTH: 185
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Derivated from human papillomavirus, strain
OTHER INFORMATION: HPV-16, E7 fusion signals of the rabies
OTHER INFORMATION: glycoprotein, clone E7*TRR.
US-09-462-993-2

```

Query Match	100.0%;	Score 48;	DB 2;	Length 185;
Best Local Similarity	100.0%;	Pred. No. 0.1;		
Matches	9;	Conservative	0;	Mismatches 0; Indels 0; Gaps 0;

QY	1 RLCVQSTHV 9
Db	85 RLCVQSTHV 93

```

RESULT 34
US-09-613-303-35
Sequence 35, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
Applicant: Siegel, Marvin
Applicant: Chu, N. Randall
Applicant: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 35
LENGTH: 198

```

```
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-35
```

```
Query Match          100.0%; Score 48; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
    |||||
Db 166 RLCVOSTHV 174
```

```
RESULT 35
; Sequence 35, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Mizen, Lee A.
; APPLICANT: Chu, N. Randall
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 35
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-35
```

```
Query Match          100.0%; Score 48; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
    |||||
Db 166 RLCVOSTHV 174
```

```
RESULT 36
US-09-485-885-1
; Sequence 1, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 220
; TYPE: PRT
```

```
; ORGANISM: Homo sapien
US-09-485-885-1
```

```
Query Match          100.0%; Score 48; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
    |||||
Db 179 RLCVOSTHV 187
```

```
RESULT 37
US-09-485-885-8
; Sequence 8, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 220
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-8
```

```
Query Match          100.0%; Score 48; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
    |||||
Db 179 RLCVOSTHV 187
```

```
RESULT 38
US-09-485-885-12
; Sequence 12, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, Teresa
; APPLICANT: Delisse, Anne-Marie Eva Fernande
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 239
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-12
```

Query Match 100.0%; Score 48; DB 2; Length 239;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
DB 198 RLCVQSTHV 206

RESULT 39
US-08-459-818-20
Sequence 20, Application US/08459818
Patent No. 5851795
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Fastseq 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,818
FILING DATE: 02-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US02
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-459-818-20
Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RLCVQSTHV 9
DB 221 RLCVQSTHV 229
RESULT 40
US-08-889-666-20
Sequence 20, Application US/08889666
Patent No. 5885579
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/889,666
FILING DATE: 08-JUL-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-889-666-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
DB 221 RLCVQSTHV 229

RESULT 41
US-08-465-078-20
Sequence 20, Application US/08465078
Patent No. 5885796
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/465,078
FILING DATE: 05-JUN-1995
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-465-078-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 221 RLCVOSTHV 229

RESULT 42
US-08-725-776-20
Sequence 20, Application US/08725776
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,776
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein

US-08-725-776-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 221 RLCVOSTHV 229

RESULT 43
US-08-488-062-20
Sequence 20, Application US/08488062
Patent No. 5977318
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,062
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-488-062-20

Query Match 100.0%; Score 48; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 221 RLCVOSTHV 229

RESULT 44
US-08-117-083-9
Sequence 9, Application US/08117083
Patent No. 5719054
GENERAL INFORMATION:
APPLICANT: Bournnell, Michael E.

```
APPLICANT: Inglis, Stephen C.
APPLICANT: Munro, Alan J.
TITLE OF INVENTION: Recombinant Virus Vectors Encoding Human
TITLE OF INVENTION: Papilloma Virus Proteins
NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Walter H. Dreger
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/117,083
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Walter H.
REGISTRATION NUMBER: 24,190
REFERENCE/DOCKET NUMBER: A-58783
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..263
OTHER INFORMATION: /note="Xaa refers to stop codon in
OTHER INFORMATION: the open reading frame."
US-08-117-083-9

Query Match 100.0%; Score 48; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
Db 227 RLCVQSTHV 235

RESULT 45
US-08-860-165-10
Sequence 10, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/130
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU P0157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 266
```

```
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-10

Query Match 100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
Db 226 RLCVQSTHV 234

RESULT 46
US-09-359-382-10
Sequence 10, Application US/09359382
Patent No. 6306397
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU P0157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-359-382-10

Query Match 100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVQSTHV 9
Db 226 RLCVQSTHV 234
```

```
RESULT 47
US-09-367-309A-1
Sequence 1, Application US/09367309A
Patent No. 6428607
GENERAL INFORMATION:
APPLICANT: MACFARLAN, RODERICK I.
APPLICANT: MALLIAROS, JIM
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
FILE REFERENCE: 017227/0149
CURRENT APPLICATION NUMBER: US/09/367,309A
CURRENT FILING DATE: 1999-08-11
PRIOR APPLICATION NUMBER: PCT/AU98/00080
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: AU PO 5178
PRIOR FILING DATE: 1997-02-19
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-367-309A-1
```

Query Match 100.0%; Score 48; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 226 RLCVOSTHV 234

RESULT 48

US-09-501-097A-25
; Sequence 25; Application US/09501097A
; Patent No. 6734173
; GENERAL INFORMATION:
; APPLICANT: Tzyy-Choo Wu
; APPLICANT: Chien-Fu Hung
; TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
; FILE REFERENCE: 2240-169349
; CURRENT APPLICATION NUMBER: US/09/501,097A
; CURRENT FILING DATE: 2000-02-09
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 25
; LENGTH: 287
; TYPE: PRT
; ORGANISM: Human papillomavirus/Mouse
US-09-501-097A-25

Query Match 100.0%; Score 48; DB 2; Length 287;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 255 RLCVOSTHV 263

RESULT 49

US-09-613-303-33
; Sequence 33; Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-33

Query Match 100.0%; Score 48; DB 2; Length 295;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 263 RLCVOSTHV 271

RESULT 50

US-10-267-311-33

; Sequence 33; Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-33

Query Match 100.0%; Score 48; DB 2; Length 295;
Best Local Similarity 100.0%; Pred. No. 0.17;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
|||||
Db 263 RLCVOSTHV 271

Search completed: May 5, 2006, 04:00:56
Job time : 25 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:07:45 ; Search time 55.8 Seconds
(Without alignments)
67.392 Million cell updates/sec

Title: US-08-170-344-16

Perfect score: 48

Sequence: 1 RLCVQSTHV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	48	100.0	9	4	US-10-161-097-11 Sequence 41, Appl
2	48	100.0	9	4	US-10-133-210-274 Sequence 274, Appl
3	48	100.0	9	5	US-10-484-063-16 Sequence 16, Appl
4	48	100.0	10	3	US-09-891-823-17 Sequence 17, Appl
5	48	100.0	10	4	US-10-365-908-17 Sequence 17, Appl
6	48	100.0	10	5	US-10-871-138-17 Sequence 17, Appl
7	48	100.0	15	4	US-10-648-547-77 Sequence 83, Appl
8	48	100.0	15	4	US-10-648-547-83 Sequence 83, Appl
9	48	100.0	15	4	US-10-648-547-89 Sequence 89, Appl
10	48	100.0	15	4	US-10-648-547-93 Sequence 93, Appl
11	48	100.0	15	4	US-10-648-547-94 Sequence 94, Appl
12	48	100.0	15	4	US-10-476-570-16 Sequence 16, Appl
13	48	100.0	15	4	US-10-476-570-48 Sequence 48, Appl
14	48	100.0	15	4	US-10-306-541-77 Sequence 77, Appl
15	48	100.0	15	4	US-10-306-541-83 Sequence 83, Appl
16	48	100.0	15	4	US-10-306-541-89 Sequence 89, Appl
17	48	100.0	15	4	US-10-306-541-93 Sequence 93, Appl
18	48	100.0	15	4	US-10-306-541-94 Sequence 94, Appl
19	48	100.0	18	4	US-10-355-268-16 Sequence 16, Appl
20	48	100.0	19	3	US-09-888-721-7 Sequence 7, Appl
21	48	100.0	19	4	US-10-668-400-9 Sequence 9, Appl
22	48	100.0	19	4	US-10-479-541-1 Sequence 1, Appl
23	48	100.0	20	3	US-09-828-645-4 Sequence 49, Appl
24	48	100.0	20	4	US-10-433-465-49 Sequence 74, Appl
25	48	100.0	20	5	US-10-890-526-74 Sequence 4, Appl
26	48	100.0	20	5	US-10-827-007-4 Sequence 4, Appl
27	48	100.0	20	5	US-10-827-083-4 Sequence 4, Appl

28	48	100.0	23	4	US-10-476-570-17 Sequence 17, Appl
29	48	100.0	98	3	US-09-728-466-1 Sequence 1, Appl
30	48	100.0	98	3	US-09-820-765-4 Sequence 4, Appl
31	48	100.0	98	3	US-09-824-017-4 Sequence 4, Appl
32	48	100.0	98	3	US-09-986-118A-4 Sequence 4, Appl
33	48	100.0	98	4	US-10-267-311-8 Sequence 8, Appl
34	48	100.0	98	4	US-10-177-390-8 Sequence 8, Appl
35	48	100.0	98	4	US-10-201-764-19 Sequence 19, Appl
36	48	100.0	98	4	US-10-392-113-29 Sequence 29, Appl
37	48	100.0	98	4	US-10-654-129-4 Sequence 4, Appl
38	48	100.0	98	4	US-10-681-410-19 Sequence 19, Appl
39	48	100.0	98	4	US-10-772-988-3 Sequence 3, Appl
40	48	100.0	98	4	US-10-479-541-5 Sequence 5, Appl
41	48	100.0	98	5	US-10-042-526A-4 Sequence 4, Appl
42	48	100.0	98	5	US-10-657-399-1 Sequence 12, Appl
43	48	100.0	98	5	US-10-858-384-12 Sequence 26, Appl
44	48	100.0	98	5	US-10-484-063-26 Sequence 5, Appl
45	48	100.0	98	5	US-10-343-448-5 Sequence 8, Appl
46	48	100.0	98	5	US-10-679-956-8 Sequence 8, Appl
47	48	100.0	98	5	US-10-367-057-17 Sequence 17, Appl
48	48	100.0	98	6	US-11-077-939-5 Sequence 5, Appl
49	48	100.0	99	4	US-10-115-440-7 Sequence 7, Appl
50	48	100.0	111	4	US-10-472-724-4 Sequence 4, Appl
51	48	100.0	121	4	US-10-267-311-12 Sequence 12, Appl
52	48	100.0	121	5	US-10-679-956-12 Sequence 12, Appl
53	48	100.0	185	6	US-11-072-288-2 Sequence 2, Appl
54	48	100.0	198	4	US-10-267-311-35 Sequence 35, Appl
55	48	100.0	198	5	US-10-679-956-35 Sequence 1, Appl
56	48	100.0	220	4	US-10-000-903-8 Sequence 8, Appl
57	48	100.0	220	5	US-10-899-771-1 Sequence 1, Appl
58	48	100.0	220	5	US-10-899-771-8 Sequence 8, Appl
59	48	100.0	220	5	US-10-000-903-12 Sequence 12, Appl
60	48	100.0	239	5	US-10-899-771-12 Sequence 12, Appl
61	48	100.0	263	3	US-09-367-309A-1 Sequence 5, Appl
62	48	100.0	289	4	US-10-115-440-5 Sequence 3, Appl
63	48	100.0	371	4	US-10-472-724-10 Sequence 10, Appl
64	48	100.0	371	5	US-10-000-903-6 Sequence 6, Appl
65	48	100.0	371	5	US-10-899-771-6 Sequence 6, Appl
66	48	100.0	390	4	US-10-000-903-14 Sequence 14, Appl
67	48	100.0	421	4	US-10-899-771-14 Sequence 14, Appl
68	48	100.0	421	4	US-10-267-311-19 Sequence 19, Appl
69	48	100.0	493	4	US-10-267-311-17 Sequence 17, Appl
70	48	100.0	493	5	US-10-679-956-19 Sequence 19, Appl
71	48	100.0	639	4	US-10-267-311-17 Sequence 17, Appl
72	48	100.0	639	5	US-10-679-956-17 Sequence 17, Appl
73	48	100.0	641	4	US-10-267-311-51 Sequence 51, Appl
74	48	100.0	641	5	US-10-679-956-51 Sequence 51, Appl
75	48	100.0	647	4	US-10-267-311-53 Sequence 53, Appl
76	48	100.0	647	5	US-10-679-956-53 Sequence 53, Appl
77	48	100.0	648	4	US-10-267-311-29 Sequence 29, Appl
78	48	100.0	648	5	US-10-679-956-29 Sequence 29, Appl
79	48	100.0	711	4	US-10-267-311-41 Sequence 41, Appl
80	48	100.0	711	5	US-10-679-956-41 Sequence 41, Appl
81	48	100.0	724	4	US-10-267-311-45 Sequence 45, Appl
82	48	100.0	724	5	US-10-679-956-45 Sequence 45, Appl
83	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
84	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
85	48	100.0	805	4	US-10-367-095-9 Sequence 9, Appl
86	48	100.0	805	5	US-10-367-095-9 Sequence 9, Appl
87	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
88	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
89	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
90	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
91	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
92	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
93	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
94	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
95	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
96	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
97	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
98	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl
99	48	100.0	805	4	US-10-368-046-9 Sequence 9, Appl
100	48	100.0	805	5	US-10-368-046-9 Sequence 9, Appl

101	39	81.2	10	4	US-10-365-908-13	Sequence 13, Appl	174	68.8	113	5	US-10-487-326-9	Sequence 9, Appl
102	39	81.2	10	5	US-10-871-138-13	Sequence 13, Appl	175	68.8	113	5	US-10-486-908-7	Sequence 7, Appl
103	39	81.2	15	4	US-10-648-547-90	Sequence 90, Appl	176	68.8	113	5	US-10-486-908-9	Sequence 9, Appl
104	39	81.2	15	4	US-10-306-541-90	Sequence 90, Appl	177	68.8	113	5	US-10-512-527-7	Sequence 7, Appl
105	37	77.1	20	3	US-09-828-645-8	Sequence 8, Appl	178	68.8	113	5	US-10-512-527-9	Sequence 9, Appl
106	37	77.1	20	5	US-10-827-007-8	Sequence 8, Appl	179	68.8	114	3	US-09-726-258-45	Sequence 45, Appl
107	37	77.1	20	5	US-10-827-083-8	Sequence 8, Appl	180	68.8	114	3	US-09-726-258-46	Sequence 46, Appl
108	37	77.1	357	5	US-10-450-763-32307	Sequence 32307, A	181	68.8	116	4	US-10-762-629-18	Sequence 18, Appl
109	37	77.1	709	4	US-10-425-115-351144	Sequence 351144,	182	68.8	116	4	US-09-753-436-66	Sequence 66, Appl
110	36	75.0	112	5	US-10-877-773-19	Sequence 19, Appl	183	68.8	116	5	US-10-163-914-66	Sequence 66, Appl
111	36	75.0	112	5	US-10-877-774-19	Sequence 19, Appl	184	68.8	116	5	US-10-745-115-66	Sequence 66, Appl
112	35	72.9	33	3	US-09-986-480-404	Sequence 404, App	185	68.8	127	3	US-09-753-436-45	Sequence 45, Appl
113	35	72.9	33	5	US-10-863-332-404	Sequence 404, App	186	68.8	127	3	US-10-163-914-45	Sequence 45, Appl
114	35	72.9	60	4	US-10-425-115-282959	Sequence 282959,	187	68.8	127	4	US-10-424-599-158058	Sequence 158058,
115	35	72.9	148	5	US-09-986-480-271	Sequence 271, App	188	68.8	127	5	US-10-745-115-45	Sequence 45, Appl
116	35	72.9	148	5	US-10-863-332-271	Sequence 271, App	189	68.8	131	3	US-09-726-258-35	Sequence 35, Appl
117	35	72.9	159	3	US-09-986-480-396	Sequence 396, App	190	68.8	131	4	US-10-138-505-6	Sequence 6, Appl
118	35	72.9	159	5	US-10-863-332-396	Sequence 396, App	191	68.8	131	4	US-10-138-505-10	Sequence 10, Appl
119	35	72.9	538	4	US-10-437-963-139050	Sequence 139050,	192	68.8	131	4	US-10-257-864A-85	Sequence 85, Appl
120	35	72.9	1204	4	US-10-408-765A-2850	Sequence 2850, Ap	193	68.8	131	4	US-10-257-864A-87	Sequence 87, Appl
121	35	72.9	1594	4	US-10-473-574-5	Sequence 5, Appl	194	68.8	131	4	US-10-221-131-90	Sequence 90, Appl
122	35	72.9	1614	4	US-10-473-574-3	Sequence 3, Appl	195	68.8	131	4	US-10-221-131-92	Sequence 92, Appl
123	35	72.9	1614	4	US-10-188-186-60	Sequence 60, Appl	196	68.8	131	4	US-10-399-518-114	Sequence 114, App
124	34	70.8	60	4	US-10-443-622-54	Sequence 54, Appl	197	68.8	131	4	US-10-399-518-116	Sequence 116, App
125	34	70.8	125	4	US-10-425-115-214410	Sequence 214410,	198	68.8	131	5	US-10-399-588-114	Sequence 114, App
126	34	70.8	165	4	US-10-837-963-102683	Sequence 102683,	199	68.8	131	5	US-10-399-588-116	Sequence 116, App
127	34	70.8	242	4	US-10-824-599-219024	Sequence 219024,	200	68.8	131	5	US-10-645-088A-85	Sequence 85, Appl
128	34	70.8	546	4	US-10-824-599-219019	Sequence 219019,	201	68.8	131	5	US-10-645-088A-87	Sequence 87, Appl
129	34	70.8	600	4	US-10-369-493-4038	Sequence 4038, Ap	202	68.8	131	5	US-10-627-556-330	Sequence 350, App
130	34	70.8	616	4	US-10-314-519-2	Sequence 2, Appl	203	68.8	139	4	US-10-372-481-29	Sequence 29, Appl
131	34	70.8	622	4	US-10-437-963-127345	Sequence 127345,	204	68.8	139	4	US-10-371-797-22	Sequence 29, Appl
132	34	70.8	630	4	US-10-314-519-4	Sequence 4, Appl	205	68.8	159	4	US-10-767-701-62756	Sequence 62756, A
133	34	70.8	840	5	US-10-450-763-39157	Sequence 39157, A	206	68.8	139	4	US-10-437-963-160384	Sequence 160384,
134	34	70.8	1192	6	US-11-097-143-5997	Sequence 5997, Ap	207	68.8	219	3	US-09-726-258-72	Sequence 72, Appl
135	34	70.8	1599	4	US-10-425-115-303878	Sequence 303878,	208	68.8	219	4	US-10-226-435A-11	Sequence 11, Appl
136	34	70.8	2958	6	US-11-097-143-40896	Sequence 40896, A	209	68.8	219	4	US-10-487-332-11	Sequence 11, Appl
137	33	68.8	31	3	US-09-956-206A-15	Sequence 15, Appl	210	68.8	219	5	US-10-487-332-11	Sequence 11, Appl
138	33	68.8	31	5	US-10-965-616-15	Sequence 15, Appl	211	68.8	219	5	US-10-486-908-11	Sequence 11, Appl
139	33	68.8	59	4	US-10-425-115-199908	Sequence 199908,	212	68.8	220	4	US-10-512-527-11	Sequence 11, Appl
140	33	68.8	65	4	US-10-425-115-230832	Sequence 230832,	213	68.8	220	5	US-10-737-208A-5	Sequence 5, Appl
141	33	68.8	72	4	US-10-425-115-223943	Sequence 223943,	214	68.8	220	6	US-11-040-071-2	Sequence 2, Appl
142	33	68.8	97	4	US-10-424-599-145843	Sequence 145843,	215	68.8	242	3	US-09-726-258-42	Sequence 42, Appl
143	33	68.8	100	3	US-09-840-459-27	Sequence 27, Appl	216	68.8	242	3	US-09-726-258-51	Sequence 51, Appl
144	33	68.8	100	4	US-10-766-773-27	Sequence 27, Appl	217	68.8	242	3	US-09-726-258-56	Sequence 56, Appl
145	33	68.8	100	4	US-10-766-610-27	Sequence 27, Appl	218	68.8	242	3	US-09-726-258-62	Sequence 62, Appl
146	33	68.8	100	4	US-10-733-563-27	Sequence 27, Appl	219	68.8	245	4	US-10-138-505-40	Sequence 40, Appl
147	33	68.8	112	3	US-09-518-737-4	Sequence 14, Appl	220	68.8	245	4	US-10-257-864A-95	Sequence 95, Appl
148	33	68.8	112	4	US-10-741-657A-14	Sequence 14, Appl	221	68.8	245	4	US-10-221-131-100	Sequence 100, App
149	33	68.8	112	4	US-10-741-657A-20	Sequence 20, Appl	222	68.8	245	4	US-10-399-518-124	Sequence 124, App
150	33	68.8	112	5	US-10-723-748-4	Sequence 4, Appl	223	68.8	245	5	US-10-399-585-123	Sequence 123, App
151	33	68.8	113	4	US-10-826-435A-7	Sequence 7, Appl	224	68.8	245	5	US-10-645-088A-95	Sequence 95, Appl
152	33	68.8	113	4	US-10-826-435A-9	Sequence 9, Appl	225	68.8	256	4	US-10-257-864A-97	Sequence 97, Appl
153	33	68.8	113	4	US-10-668-370-675	Sequence 675, App	226	68.8	256	4	US-10-257-864A-98	Sequence 98, App
154	33	68.8	113	4	US-10-668-370-677	Sequence 677, App	227	68.8	256	4	US-10-221-131-102	Sequence 102, App
155	33	68.8	113	4	US-10-468-370-679	Sequence 679, App	228	68.8	256	4	US-10-221-131-103	Sequence 103, App
156	33	68.8	113	4	US-10-668-370-681	Sequence 681, App	229	68.8	256	4	US-10-399-518-126	Sequence 126, App
157	33	68.8	113	4	US-10-668-370-683	Sequence 683, App	230	68.8	256	4	US-10-399-518-127	Sequence 127, App
158	33	68.8	113	4	US-10-668-370-685	Sequence 685, App	231	68.8	256	5	US-10-399-585-125	Sequence 125, App
159	33	68.8	113	4	US-10-668-370-687	Sequence 687, App	232	68.8	256	5	US-10-399-585-126	Sequence 126, App
160	33	68.8	113	4	US-10-668-370-689	Sequence 689, App	233	68.8	256	5	US-10-645-088A-98	Sequence 98, Appl
161	33	68.8	113	4	US-10-468-496-2006	Sequence 2006, App	234	68.8	256	5	US-10-645-088A-98	Sequence 98, Appl
162	33	68.8	113	4	US-10-668-496-2008	Sequence 2008, App	235	68.8	262	5	US-10-627-556-352	Sequence 352, App
163	33	68.8	113	4	US-10-668-496-2010	Sequence 2010, App	236	68.8	262	5	US-10-627-556-356	Sequence 356, App
164	33	68.8	113	4	US-10-668-496-2012	Sequence 2012, App	237	68.8	271	4	US-10-138-505-10	Sequence 30, Appl
165	33	68.8	113	4	US-10-668-496-2014	Sequence 2014, App	238	68.8	271	4	US-10-138-505-14	Sequence 34, Appl
166	33	68.8	113	4	US-10-468-496-2016	Sequence 2016, App	239	68.8	271	4	US-10-257-864A-91	Sequence 91, Appl
167	33	68.8	113	4	US-10-468-496-2018	Sequence 2018, App	240	68.8	271	4	US-10-257-864A-93	Sequence 93, Appl
168	33	68.8	113	4	US-10-468-496-2020	Sequence 2020, App	241	68.8	271	4	US-10-221-131-95	Sequence 95, Appl
169	33	68.8	113	4	US-10-487-322-7	Sequence 7, Appl	242	68.8	271	4	US-10-221-131-96	Sequence 96, Appl
170	33	68.8	113	4	US-10-487-322-9	Sequence 9, Appl	243	68.8	271	4	US-10-221-131-98	Sequence 98, Appl
171	33	68.8	113	4	US-10-737-208A-1	Sequence 10, Appl	244	68.8	271	4	US-10-399-518-120	Sequence 120, App
172	33	68.8	113	5	US-10-789-090-10	Sequence 10, Appl	245	68.8	271	4	US-10-399-518-122	Sequence 122, App
173	33	68.8	113	5	US-10-487-326-7	Sequence 7, Appl	246	68.8	271	5	US-10-399-585-119	Sequence 119, App

247	33	68.8	271	5	US-10-399-585-121	Sequence 121, App	320	32	66.7	212	4	US-10-437-963-131522	Sequence 131522,
248	33	68.8	271	5	US-10-645-085A-91	Sequence 91, Appl	321	32	66.7	241	4	US-10-424-599-198155	Sequence 198155,
249	33	68.8	271	5	US-10-645-085A-93	Sequence 93, Appl	322	32	66.7	272	4	US-10-424-599-168451	Sequence 168451,
250	33	68.8	274	4	US-10-138-505-26	Sequence 26, Appl	323	32	66.7	400	5	US-10-972-024-280	Sequence 280, App
251	33	68.8	274	4	US-10-138-505-32	Sequence 32, Appl	324	32	66.7	411	5	US-10-450-763-4443	Sequence 44243, A
252	33	68.8	274	4	US-10-257-864A-90	Sequence 90, Appl	325	32	66.7	455	6	US-11-097-143-42738	Sequence 42738, A
253	33	68.8	274	4	US-10-257-864A-92	Sequence 92, Appl	326	32	66.7	469	4	US-10-282-122A-65124	Sequence 65124, A
254	33	68.8	274	4	US-10-221-131-97	Sequence 97, Appl	327	32	66.7	480	4	US-10-369-493-9031	Sequence 9031, Ap
255	33	68.8	274	4	US-10-399-518-119	Sequence 119, App	328	32	66.7	493	4	US-10-108-260A-4124	Sequence 4124, Ap
256	33	68.8	274	4	US-10-399-518-121	Sequence 121, App	329	32	66.7	498	4	US-10-767-701-44409	Sequence 44209, A
257	33	68.8	274	5	US-10-399-585-118	Sequence 118, App	330	32	66.7	608	4	US-10-425-115-316171	Sequence 318171, A
258	33	68.8	274	5	US-10-399-585-120	Sequence 120, App	331	32	66.7	646	5	US-10-732-923-22815	Sequence 22803, A
259	33	68.8	274	5	US-10-645-085A-90	Sequence 90, Appl	332	32	66.7	646	5	US-10-732-923-22809	Sequence 57685, A
260	33	68.8	315	4	US-10-645-085A-92	Sequence 92, Appl	333	32	66.7	728	4	US-10-282-122A-57685	Sequence 184137, A
261	33	68.8	323	4	US-10-767-701-38028	Sequence 38028, A	334	32	66.7	766	4	US-10-437-963-184389	Sequence 183489, A
262	33	68.8	324	4	US-10-425-115-235782	Sequence 235782, A	335	32	66.7	804	4	US-10-437-963-183449	Sequence 183449, A
263	33	68.8	324	4	US-10-437-963-160386	Sequence 160386, A	336	32	66.7	811	4	US-10-425-114-72610	Sequence 72610, A
264	33	68.8	331	3	US-09-833-245-1917	Sequence 1917, Ap	337	32	66.7	911	4	US-10-437-963-112571	Sequence 112571, A
265	33	68.8	357	4	US-10-425-114-11311	Sequence 71311, A	338	32	66.7	913	4	US-10-425-115-331034	Sequence 331034, A
266	33	68.8	365	4	US-10-767-701-44164	Sequence 44164, A	339	32	66.7	955	4	US-10-425-115-59036	Sequence 59036, A
267	33	68.8	409	3	US-09-833-245-1503	Sequence 1503, Ap	340	32	66.7	1874	4	US-10-437-963-147331	Sequence 147331, A
268	33	68.8	463	4	US-10-425-114-67932	Sequence 67932, A	341	32	66.7	1885	4	US-10-437-963-147331	Sequence 147331, A
269	33	68.8	474	4	US-10-270-555-3	Sequence 3, Appli	342	32	66.7	2027	5	US-10-450-763-38257	Sequence 38257, A
270	33	68.8	479	6	US-11-040-071-9	Sequence 9, Appli	343	31	64.6	50	4	US-10-425-115-186247	Sequence 186247, A
271	33	68.8	495	5	US-10-627-556-358	Sequence 358, App	344	31	64.6	53	5	US-10-450-763-47821	Sequence 47821, A
272	33	68.8	495	5	US-10-627-556-360	Sequence 360, App	345	31	64.6	55	4	US-10-425-115-259473	Sequence 259473, A
273	33	68.8	507	4	US-10-239-656-47	Sequence 47, Appl	346	31	64.6	57	4	US-10-424-599-179952	Sequence 179052, A
274	33	68.8	510	4	US-10-239-656-48	Sequence 48, Appl	347	31	64.6	59	4	US-10-424-599-245303	Sequence 245503, A
275	33	68.8	510	4	US-10-239-656-49	Sequence 49, Appl	348	31	64.6	69	3	US-09-764-891-4415	Sequence 4415, Ap
276	33	68.8	532	6	US-11-036-098-18	Sequence 18, Appl	349	31	64.6	69	4	US-10-437-963-175868	Sequence 175868, A
277	33	68.8	533	4	US-10-257-864A-96	Sequence 96, Appl	350	31	64.6	70	4	US-10-425-115-345645	Sequence 345645, A
278	33	68.8	533	4	US-10-221-131-101	Sequence 101, App	351	31	64.6	70	3	US-09-933-767-971	Sequence 971, App
279	33	68.8	533	4	US-10-399-518-125	Sequence 125, App	352	31	64.6	70	4	US-10-004-860-971	Sequence 971, App
280	33	68.8	533	5	US-10-399-585-124	Sequence 124, App	353	31	64.6	70	4	US-10-023-282-971	Sequence 971, App
281	33	68.8	533	5	US-10-645-085A-96	Sequence 96, Appl	354	31	64.6	76	4	US-10-425-115-258635	Sequence 258635, A
282	33	68.8	603	4	US-10-425-115-67956	Sequence 267956, A	355	31	64.6	76	4	US-10-425-115-331875	Sequence 331875, A
283	33	68.8	605	4	US-10-425-115-67959	Sequence 267959, A	356	31	64.6	82	4	US-10-425-115-222751	Sequence 222751, A
284	33	68.8	620	4	US-10-425-115-350282	Sequence 350282, A	357	31	64.6	86	3	US-09-864-108A-219	Sequence 219, App
285	33	68.8	632	6	US-10-425-114-58621	Sequence 58621, A	358	31	64.6	86	4	US-10-425-115-239376	Sequence 239376, A
286	33	68.8	632	6	US-11-097-143-8247	Sequence 8247, A	359	31	64.6	100	3	US-09-840-459-23	Sequence 23, Appl
287	33	68.8	634	4	US-10-425-114-54045	Sequence 54045, A	360	31	64.6	100	4	US-10-766-773-23	Sequence 23, Appl
288	33	68.8	641	5	US-10-450-763-40145	Sequence 40145, A	361	31	64.6	100	4	US-10-766-610-23	Sequence 23, Appl
289	33	68.8	642	4	US-10-437-963-167967	Sequence 167967, A	362	31	64.6	100	4	US-10-733-563-23	Sequence 23, Appl
290	33	68.8	670	3	US-09-833-245-1304	Sequence 1304, Ap	363	31	64.6	100	4	US-10-425-115-259570	Sequence 259570, A
291	33	68.8	737	4	US-10-437-963-203869	Sequence 203869, A	364	31	64.6	114	6	US-11-009-443-88	Sequence 88, Appl
292	33	68.8	872	5	US-10-450-763-42647	Sequence 42647, A	365	31	64.6	124	4	US-10-425-115-197150	Sequence 197150, A
293	33	68.8	896	5	US-10-450-763-34798	Sequence 34798, A	366	31	64.6	126	4	US-10-425-115-197153	Sequence 197153, A
294	33	68.8	947	5	US-10-417-375-32	Sequence 32, Appl	367	31	64.6	127	4	US-10-372-876-219	Sequence 219, App
295	33	68.8	957	5	US-10-753-267-84	Sequence 84, Appl	368	31	64.6	127	4	US-10-372-876-219	Sequence 219, App
296	33	68.8	957	5	US-10-852-335A-180	Sequence 180, App	369	31	64.6	132	4	US-10-006-773-111	Sequence 11, Appl
297	33	68.8	1067	5	US-10-450-763-38408	Sequence 38408, A	370	31	64.6	138	4	US-10-369-493-9126	Sequence 9126, Ap
298	33	68.8	1152	4	US-10-369-493-5802	Sequence 5802, Ap	371	31	64.6	144	4	US-10-029-386-77420	Sequence 27420, A
299	33	68.8	1267	5	US-10-450-763-37781	Sequence 37781, A	372	31	64.6	148	4	US-10-104-047-2971	Sequence 2971, Ap
300	33	68.8	1288	5	US-10-450-763-34793	Sequence 34793, A	373	31	64.6	159	4	US-10-437-963-182409	Sequence 182409, A
301	33	68.8	1288	5	US-10-450-763-42636	Sequence 42636, A	374	31	64.6	167	4	US-10-016-447-17	Sequence 17, Appl
302	33	68.8	1438	5	US-10-450-763-42377	Sequence 42377, A	375	31	64.6	168	4	US-10-425-115-355394	Sequence 355394, A
303	32	66.7	48	4	US-10-425-115-191123	Sequence 191123, A	376	31	64.6	204	4	US-10-302-812-34	Sequence 34, Appl
304	32	66.7	53	4	US-10-424-599-169342	Sequence 169342, A	377	31	64.6	204	5	US-10-678-712-1	Sequence 1, Appli
305	32	66.7	58	4	US-10-425-115-353386	Sequence 353386, A	378	31	64.6	204	5	US-10-678-712-3	Sequence 3, Appli
306	32	66.7	69	4	US-10-437-963-169780	Sequence 169780, A	379	31	64.6	205	5	US-10-678-712-2	Sequence 2, Appli
307	32	66.7	71	4	US-10-437-963-204358	Sequence 204358, A	380	31	64.6	220	5	US-10-282-122A-71829	Sequence 71829, A
308	32	66.7	75	4	US-10-424-599-223295	Sequence 223295, A	381	31	64.6	262	5	US-10-774-355A-2579	Sequence 2579, Ap
309	32	66.7	79	4	US-10-437-963-152204	Sequence 152204, A	382	31	64.6	278	4	US-10-282-122A-54649	Sequence 54649, A
310	32	66.7	103	4	US-10-437-963-141470	Sequence 141470, A	383	31	64.6	338	5	US-10-450-763-33808	Sequence 53808, A
311	32	66.7	105	4	US-10-424-599-219376	Sequence 219376, A	384	31	64.6	351	4	US-10-282-122A-63155	Sequence 63155, A
312	32	66.7	111	3	US-09-840-459-11	Sequence 11, Appl	385	31	64.6	360	5	US-10-825-692-66	Sequence 86, Appl
313	32	66.7	118	3	US-09-864-761-45385	Sequence 45385, A	386	31	64.6	366	4	US-10-282-122A-43440	Sequence 43440, A
314	32	66.7	124	4	US-10-424-599-178998	Sequence 178998, A	387	31	64.6	374	6	US-11-097-143-10203	Sequence 10203, A
315	32	66.7	134	4	US-10-437-963-129535	Sequence 129535, A	388	31	64.6	405	6	US-11-097-143-42381	Sequence 42381, A
316	32	66.7	144	4	US-10-424-599-246126	Sequence 246126, A	389	31	64.6	412	4	US-10-437-963-439019	Sequence 1439019, A
317	32	66.7	151	4	US-10-425-115-236978	Sequence 236978, A	390	31	64.6	419	5	US-10-312-273-239	Sequence 239, App
318	32	66.7	156	4	US-10-425-115-355263	Sequence 355263, A	391	31	64.6	419	5	US-10-503-135-113	Sequence 113, App
319	32	66.7	157	4	US-10-424-599-207934	Sequence 207934, A	392	31	64.6	448	4	US-10-289-762-370	Sequence 370, App

393	31	64.6	452	5	US-10-450-763-50611	Sequence 50611, A	466	31	64.6	1809	5	US-10-450-763-11365	Sequence 3165, A
394	31	64.6	462	4	US-10-128-714-3252	Sequence 3292, Ap	467	31	64.6	1824	5	US-10-450-763-39511	Sequence 39511, A
395	31	64.6	462	4	US-10-128-714-8292	Sequence 8292, Ap	468	31	64.6	2490	5	US-10-450-763-44910	Sequence 44910, A
396	31	64.6	468	4	US-10-369-493-6465	Sequence 6465, Ap	469	30	62.5	9	3	US-09-400-564-5	Sequence 5, Appl1
397	31	64.6	506	4	US-10-282-122A-66060	Sequence 66060, A	470	30	62.5	9	3	US-09-891-821-15	Sequence 15, Appl1
398	31	64.6	516	4	US-10-282-122A-76486	Sequence 76486, A	471	30	62.5	9	4	US-10-365-908-15	Sequence 15, Appl1
399	31	64.6	588	4	US-10-369-493-12456	Sequence 12456, A	472	30	62.5	9	5	US-10-871-138-15	Sequence 15, Appl1
400	31	64.6	568	4	US-10-450-763-37270	Sequence 37270, A	473	30	62.5	10	4	US-10-216-122-51	Sequence 51, Appl1
401	31	64.6	577	5	US-10-450-763-42004	Sequence 42004, A	474	30	62.5	12	3	US-09-400-564-3	Sequence 3, Appl1
402	31	64.6	601	4	US-10-437-963-175912	Sequence 175912, A	475	30	62.5	14	3	US-09-400-564-2	Sequence 2, Appl1
403	31	64.6	625	4	US-10-425-114-53649	Sequence 53649, A	476	30	62.5	13	3	US-09-400-564-1	Sequence 1, Appl1
404	31	64.6	642	4	US-10-437-963-134068	Sequence 134068, A	477	30	62.5	15	3	US-09-400-564-4	Sequence 4, Appl1
405	31	64.6	710	5	US-10-450-763-51154	Sequence 51154, A	478	30	62.5	26	3	US-09-995-496-90	Sequence 90, Appl1
406	31	64.6	727	4	US-10-260-046-24	Sequence 24, Appl1	479	30	62.5	27	3	US-09-400-564-13	Sequence 13, Appl1
407	31	64.6	729	4	US-10-437-963-120534	Sequence 120534, A	480	30	62.5	38	4	US-10-425-115-340355	Sequence 340355, A
408	31	64.6	746	4	US-10-425-114-63880	Sequence 63880, A	481	30	62.5	39	4	US-10-424-559-280598	Sequence 280598, A
409	31	64.6	750	4	US-10-425-114-41030	Sequence 41030, A	482	30	62.5	40	4	US-10-437-963-140748	Sequence 140748, A
410	31	64.6	761	4	US-10-425-115-244120	Sequence 244120, A	483	30	62.5	42	4	US-10-437-963-119837	Sequence 179837, A
411	31	64.6	786	4	US-10-424-599-254409	Sequence 254409, A	484	30	62.5	47	4	US-10-425-115-218655	Sequence 218655, A
412	31	64.6	835	4	US-10-437-963-112993	Sequence 112993, A	485	30	62.5	48	4	US-10-424-599-11505	Sequence 171505, A
413	31	64.6	835	6	US-11-097-143-2871	Sequence 2871, Ap	486	30	62.5	48	4	US-10-425-115-288569	Sequence 288569, A
414	31	64.6	846	4	US-10-369-493-17859	Sequence 17859, A	487	30	62.5	48	4	US-10-425-115-353580	Sequence 353580, A
415	31	64.6	847	4	US-10-369-493-10585	Sequence 10585, A	488	30	62.5	54	4	US-10-425-115-214668	Sequence 214668, A
416	31	64.6	926	4	US-10-425-115-308043	Sequence 308043, A	489	30	62.5	55	4	US-10-425-115-224782	Sequence 224782, A
417	31	64.6	940	4	US-10-425-114-56521	Sequence 56521, A	490	30	62.5	58	4	US-10-425-115-318278	Sequence 318278, A
418	31	64.6	945	5	US-10-450-763-37244	Sequence 37244, A	491	30	62.5	59	4	US-10-425-115-189462	Sequence 189462, A
419	31	64.6	1031	5	US-10-450-763-35114	Sequence 35114, A	492	30	62.5	66	4	US-10-425-115-330642	Sequence 330642, A
420	31	64.6	1048	5	US-10-491-472-24	Sequence 24, Appl1	493	30	62.5	65	4	US-10-425-115-353718	Sequence 353718, A
421	31	64.6	1104	5	US-10-450-763-36431	Sequence 36431, A	494	30	62.5	71	4	US-10-424-599-166477	Sequence 166477, A
422	31	64.6	1104	5	US-10-450-763-36976	Sequence 36976, A	495	30	62.5	74	4	US-10-425-115-202908	Sequence 202908, A
423	31	64.6	1104	5	US-10-450-763-41172	Sequence 41172, A	496	30	62.5	75	4	US-10-437-963-172604	Sequence 172604, A
424	31	64.6	1118	5	US-10-450-763-44912	Sequence 44912, A	497	30	62.5	76	4	US-10-425-115-219922	Sequence 219922, A
425	31	64.6	1125	5	US-10-450-763-54017	Sequence 54017, A	498	30	62.5	78	4	US-10-424-599-170237	Sequence 170237, A
426	31	64.6	1130	5	US-10-450-763-50272	Sequence 50272, A	499	30	62.5	83	4	US-10-425-115-258488	Sequence 258488, A
427	31	64.6	1140	4	US-10-425-115-232132	Sequence 232132, A	500	30	62.5	82	3	US-09-864-408A-7718	Sequence 7718, Ap
428	31	64.6	1150	5	US-10-450-763-44308	Sequence 44308, A	501	30	62.5	90	3	US-09-925-299-824	Sequence 824, App
429	31	64.6	1150	5	US-10-450-763-45129	Sequence 45129, A	502	30	62.5	90	3	US-09-925-299-824	Sequence 824, App
430	31	64.6	1150	5	US-10-450-763-50235	Sequence 50235, A	503	30	62.5	91	4	US-10-424-599-167488	Sequence 167488, A
431	31	64.6	1194	5	US-10-450-763-34646	Sequence 34646, A	504	30	62.5	93	5	US-10-474-691-70	Sequence 70, Appl1
432	31	64.6	1239	4	US-10-282-122A-76629	Sequence 76629, A	505	30	62.5	94	4	US-10-437-963-16973	Sequence 16973, A
433	31	64.6	1272	4	US-10-114-270-30	Sequence 30, Appl1	506	30	62.5	98	4	US-10-425-115-248104	Sequence 248104, A
434	31	64.6	1274	4	US-10-415-615-3	Sequence 3, Appl1	507	30	62.5	100	3	US-09-840-459-25	Sequence 25, Appl1
435	31	64.6	1275	4	US-10-025-201-3	Sequence 3, Appl1	508	30	62.5	100	3	US-09-840-459-29	Sequence 29, Appl1
436	31	64.6	1275	5	US-10-800-322-34	Sequence 34, Appl1	509	30	62.5	100	4	US-10-424-599-246319	Sequence 246319, A
437	31	64.6	1284	5	US-10-450-763-36412	Sequence 36412, A	510	30	62.5	100	4	US-10-424-599-253990	Sequence 253990, A
438	31	64.6	1284	5	US-10-450-763-39995	Sequence 39995, A	511	30	62.5	100	4	US-10-766-773-25	Sequence 25, Appl1
439	31	64.6	1284	5	US-10-450-763-41154	Sequence 41154, A	512	30	62.5	100	4	US-10-766-773-29	Sequence 29, Appl1
440	31	64.6	1289	5	US-10-450-763-45248	Sequence 45248, A	513	30	62.5	100	4	US-10-766-610-25	Sequence 25, Appl1
441	31	64.6	1289	5	US-10-450-763-48857	Sequence 48857, A	514	30	62.5	100	4	US-10-733-563-25	Sequence 25, Appl1
442	31	64.6	1310	4	US-10-369-493-3344	Sequence 3344, Ap	515	30	62.5	100	4	US-10-733-563-25	Sequence 25, Appl1
443	31	64.6	1328	5	US-10-450-763-40026	Sequence 40026, A	516	30	62.5	103	4	US-10-733-563-25	Sequence 25, Appl1
444	31	64.6	1328	5	US-10-450-763-41186	Sequence 41186, A	517	30	62.5	103	4	US-10-424-599-169393	Sequence 169393, A
445	31	64.6	1397	5	US-10-473-451-6	Sequence 6, Appl1	518	30	62.5	104	4	US-10-424-599-206105	Sequence 206105, A
446	31	64.6	1420	5	US-10-450-763-50282	Sequence 50282, A	519	30	62.5	107	5	US-10-450-763-58781	Sequence 58781, A
447	31	64.6	1483	5	US-10-450-763-36427	Sequence 36427, A	520	30	62.5	108	4	US-10-767-701-38377	Sequence 38377, A
448	31	64.6	1483	5	US-10-450-763-40008	Sequence 40008, A	521	30	62.5	110	4	US-10-471-475A-2	Sequence 2, Appl1
449	31	64.6	1483	5	US-10-450-763-41168	Sequence 41168, A	522	30	62.5	110	4	US-10-471-475A-6	Sequence 6, Appl1
450	31	64.6	1557	5	US-10-450-763-32871	Sequence 32871, A	523	30	62.5	110	4	US-10-471-475A-7	Sequence 7, Appl1
451	31	64.6	1628	5	US-10-450-763-39055	Sequence 39055, A	524	30	62.5	112	5	US-10-858-858-7	Sequence 7, Appl1
452	31	64.6	1680	5	US-10-450-763-48004	Sequence 48004, A	525	30	62.5	112	4	US-10-194-975-119	Sequence 119, App
453	31	64.6	1681	5	US-10-450-763-31766	Sequence 31766, A	526	30	62.5	112	4	US-10-741-657A-12	Sequence 12, Appl1
454	31	64.6	1703	5	US-10-450-763-42885	Sequence 42885, A	527	30	62.5	112	5	US-10-846-981-2	Sequence 2, Appl1
455	31	64.6	1709	5	US-10-450-763-32700	Sequence 32700, A	528	30	62.5	112	5	US-10-916-923-2	Sequence 2, Appl1
456	31	64.6	1709	5	US-10-450-763-33411	Sequence 33411, A	529	30	62.5	112	5	US-10-735-916A-57	Sequence 57, Appl1
457	31	64.6	1709	5	US-10-450-763-34338	Sequence 34338, A	530	30	62.5	112	5	US-10-858-858-7	Sequence 7, Appl1
458	31	64.6	1709	5	US-10-450-763-36414	Sequence 36414, A	531	30	62.5	118	4	US-10-012-952A-145	Sequence 145, App
459	31	64.6	1709	5	US-10-450-763-36861	Sequence 36861, A	532	30	62.5	120	4	US-10-094-749-3130	Sequence 3130, Ap
460	31	64.6	1709	5	US-10-450-763-38994	Sequence 38994, A	533	30	62.5	123	3	US-09-947-839-11	Sequence 11, Appl1
461	31	64.6	1709	5	US-10-450-763-39997	Sequence 39997, A	534	30	62.5	131	3	US-10-858-858-2	Sequence 2, Appl1
462	31	64.6	1709	5	US-10-450-763-41156	Sequence 41156, A	535	30	62.5	141	5	US-10-425-115-26056	Sequence 26056, A
463	31	64.6	1709	5	US-10-450-763-50232	Sequence 50232, A	536	30	62.5	151	4	US-10-425-115-38773	Sequence 38773, A
464	31	64.6	1709	5	US-10-450-763-51138	Sequence 51138, A	537	30	62.5	151	4	US-10-425-115-38773	Sequence 38773, A
465	31	64.6	1746	5	US-10-450-763-36003	Sequence 36003, A	538	30	62.5	154	4	US-10-424-599-241213	Sequence 241213, A

539	30	62.5	160	4	US-10-004-551-8	Sequence 8, Appl1	612	30	62.5	585	4	US-10-419-723-9	Sequence 9, Appl1
540	30	62.5	160	6	US-11-045-029-8	Sequence 8, Appl1	613	30	62.5	585	4	US-10-255-120-9	Sequence 9, Appl1
541	30	62.5	161	4	US-10-108-260A-4720	Sequence 4720, Ap	614	30	62.5	585	5	US-10-868-397-9	Sequence 9, Appl1
542	30	62.5	167	4	US-10-471-475A-19	Sequence 19, Appl	615	30	62.5	596	6	US-11-097-143-18165	Sequence 18165, A
543	30	62.5	167	4	US-10-471-475A-20	Sequence 20, Appl	616	30	62.5	611	4	US-10-247-671-128	Sequence 6, Appl
544	30	62.5	167	4	US-10-471-475A-21	Sequence 21, Appl	617	30	62.5	611	5	US-10-873-595-6	Sequence 6, Appl
545	30	62.5	167	4	US-10-471-475A-22	Sequence 22, Appl	618	30	62.5	614	4	US-10-369-493-10317	Sequence 10317, A
546	30	62.5	177	3	US-09-734-017A-70	Sequence 70, Appl	619	30	62.5	621	4	US-10-424-599-164191	Sequence 164191, A
547	30	62.5	187	4	US-10-017-161-1284	Sequence 1284, Ap	620	30	62.5	625	3	US-09-925-302-449	Sequence 449, App
548	30	62.5	187	4	US-10-017-161-1506	Sequence 1506, Ap	621	30	62.5	625	3	US-09-925-302-449	Sequence 449, App
549	30	62.5	187	4	US-10-017-161-1552	Sequence 1552, Ap	622	30	62.5	650	6	US-11-097-143-11667	Sequence 11667, A
550	30	62.5	187	4	US-10-017-161-1552	Sequence 1552, Ap	623	30	62.5	654	4	US-10-408-765A-1040	Sequence 1040, Ap
551	30	62.5	199	4	US-10-425-115-236718	Sequence 236718, A	624	30	62.5	664	5	US-10-735-973-2	Sequence 2, Appl1
552	30	62.5	200	4	US-10-437-963-501224	Sequence 5776, Ap	625	30	62.5	664	5	US-10-076-597-51	Sequence 51, Appl
553	30	62.5	209	3	US-09-815-242-5776	Sequence 5776, Ap	626	30	62.5	673	4	US-10-067-514-6	Sequence 6, Appl1
554	30	62.5	220	4	US-10-282-122A-44371	Sequence 44371, A	627	30	62.5	673	4	US-10-119-723-6	Sequence 6, Appl1
555	30	62.5	220	4	US-10-282-122A-44372	Sequence 44372, A	628	30	62.5	673	4	US-10-119-723-6	Sequence 6, Appl1
556	30	62.5	220	4	US-10-282-122A-44372	Sequence 44372, A	629	30	62.5	673	4	US-10-255-120-6	Sequence 6, Appl1
557	30	62.5	220	4	US-10-282-122A-71114	Sequence 71114, A	630	30	62.5	673	4	US-10-239-439-4	Sequence 4, Appl1
558	30	62.5	221	6	US-11-097-143-35010	Sequence 35010, A	631	30	62.5	673	5	US-10-684-206-36	Sequence 36, Appl
559	30	62.5	226	4	US-10-437-963-147437	Sequence 147437, A	632	30	62.5	673	5	US-10-735-973-1	Sequence 1, Appl1
560	30	62.5	227	5	US-10-450-763-42602	Sequence 42602, A	633	30	62.5	675	5	US-10-688-397-6	Sequence 6, Appl1
561	30	62.5	228	4	US-10-724-972A-3816	Sequence 3816, Ap	634	30	62.5	679	5	US-10-735-973-6	Sequence 6, Appl1
562	30	62.5	231	4	US-10-424-599-164189	Sequence 164189, A	635	30	62.5	680	6	US-11-097-143-19410	Sequence 19410, A
563	30	62.5	232	4	US-10-767-701-31670	Sequence 31670, A	636	30	62.5	687	4	US-10-067-514-8	Sequence 8, Appl1
564	30	62.5	252	3	US-09-887-853-4	Sequence 4, Appl1	637	30	62.5	687	4	US-10-419-723-8	Sequence 8, Appl1
565	30	62.5	252	3	US-10-683-547-4	Sequence 4, Appl1	638	30	62.5	687	4	US-10-255-120-8	Sequence 8, Appl1
566	30	62.5	260	3	US-09-782-672-2	Sequence 2, Appl1	639	30	62.5	687	5	US-10-358-120-8	Sequence 8, Appl1
567	30	62.5	260	3	US-09-782-672-2	Sequence 2, Appl1	640	30	62.5	687	5	US-10-358-120-8	Sequence 8, Appl1
568	30	62.5	274	4	US-10-017-161-2422	Sequence 2422, Ap	641	30	62.5	689	5	US-10-735-973-4	Sequence 4, Appl1
569	30	62.5	274	4	US-10-232-798-3062	Sequence 2622, Ap	642	30	62.5	689	5	US-10-424-599-146699	Sequence 146699, A
570	30	62.5	282	4	US-10-437-963-116625	Sequence 116625, A	643	30	62.5	723	4	US-10-450-763-37323	Sequence 37323, A
571	30	62.5	282	4	US-10-292-798-1060	Sequence 1060, Ap	644	30	62.5	723	4	US-10-450-763-37323	Sequence 37323, A
572	30	62.5	289	4	US-10-425-114-71478	Sequence 71478, A	645	30	62.5	745	4	US-10-369-493-17135	Sequence 17135, A
573	30	62.5	297	4	US-10-282-122A-63422	Sequence 63422, A	646	30	62.5	745	4	US-10-076-597-50	Sequence 50, Appl
574	30	62.5	298	4	US-10-425-114-36924	Sequence 36924, A	647	30	62.5	745	4	US-10-067-514-4	Sequence 4, Appl1
575	30	62.5	314	4	US-10-767-701-3878	Sequence 43878, A	648	30	62.5	745	4	US-10-419-723-4	Sequence 4, Appl1
576	30	62.5	315	4	US-10-085-198-182	Sequence 182, App	649	30	62.5	745	5	US-10-255-120-4	Sequence 4, Appl1
577	30	62.5	332	3	US-09-922-181A-6940	Sequence 6940, Ap	650	30	62.5	745	5	US-10-868-397-4	Sequence 4, Appl1
578	30	62.5	341	5	US-10-771-833-12	Sequence 8, Appl1	651	30	62.5	747	5	US-10-735-973-3	Sequence 3, Appl1
579	30	62.5	341	5	US-10-866-949-12	Sequence 12, Appl	652	30	62.5	747	5	US-10-492-835-8	Sequence 8, Appl1
580	30	62.5	341	5	US-10-866-949-12	Sequence 12, Appl	653	30	62.5	747	5	US-10-492-835-8	Sequence 8, Appl1
581	30	62.5	342	5	US-10-825-692-90	Sequence 90, Appl	654	30	62.5	747	5	US-10-492-835-12	Sequence 12, Appl
582	30	62.5	357	5	US-10-450-763-39163	Sequence 39163, A	655	30	62.5	748	5	US-10-492-835-27	Sequence 27, Appl
583	30	62.5	364	4	US-10-282-122A-76572	Sequence 76572, A	656	30	62.5	748	5	US-10-492-835-28	Sequence 28, Appl
584	30	62.5	371	4	US-10-282-122A-76362	Sequence 76362, A	657	30	62.5	750	5	US-10-492-835-28	Sequence 28, Appl
585	30	62.5	388	5	US-10-282-122A-64085	Sequence 64085, A	658	30	62.5	764	4	US-10-425-115-58448	Sequence 58448, A
586	30	62.5	398	5	US-10-739-930-5699	Sequence 5699, Ap	659	30	62.5	764	4	US-10-425-115-262277	Sequence 262277, A
587	30	62.5	407	5	US-10-450-763-39117	Sequence 39117, A	660	30	62.5	790	5	US-10-505-316-10	Sequence 10, Appl
588	30	62.5	418	4	US-10-112-944-341	Sequence 341, App	661	30	62.5	801	4	US-10-424-599-226123	Sequence 226123, A
589	30	62.5	418	4	US-10-112-944-341	Sequence 341, App	662	30	62.5	808	4	US-10-369-493-12189	Sequence 2189, App
590	30	62.5	420	4	US-10-250-615-11	Sequence 11, Appl	663	30	62.5	809	4	US-10-067-514-2	Sequence 2, Appl1
591	30	62.5	426	4	US-10-788-792-216	Sequence 216, App	664	30	62.5	809	4	US-10-419-723-2	Sequence 2, Appl1
592	30	62.5	426	4	US-10-788-792-216	Sequence 216, App	665	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
593	30	62.5	450	4	US-10-425-114-59439	Sequence 59439, A	666	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
594	30	62.5	450	4	US-10-369-493-4649	Sequence 4649, Ap	667	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
595	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	668	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
596	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	669	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
597	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	670	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
598	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	671	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
599	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	672	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
600	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	673	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
601	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	674	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
602	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	675	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
603	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	676	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
604	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	677	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
605	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	678	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
606	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	679	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
607	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	680	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
608	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	681	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
609	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	682	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
610	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	683	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl
611	30	62.5	452	4	US-10-369-493-4649	Sequence 4649, Ap	684	30	62.5	809	4	US-10-257-909A-26	Sequence 26, Appl

685	29.5	61.5	242	5	US-10-450-763-36299	Sequence 36299, A	758	29	60.4	104	4	US-10-424-599-170256	Sequence 170256,
686	29.5	61.5	332	5	US-10-450-763-39853	Sequence 39853, A	759	29	60.4	104	4	US-10-669-161-30	Sequence 30, Appl
687	29.5	61.5	433	5	US-10-450-763-47802	Sequence 47802, A	760	29	60.4	107	4	US-10-425-115-352326	Sequence 352326,
688	29.5	61.5	764	5	US-10-108-260A-4398	Sequence 4398, Ap	761	29	60.4	110	4	US-10-425-115-207934	Sequence 207934,
689	29	60.4	5	5	US-10-503-135-45	Sequence 45, Appl	762	29	60.4	110	5	US-10-485-555-40	Sequence 40, Appl
690	29	60.4	25	4	US-10-029-386-33999	Sequence 33999, A	763	29	60.4	111	5	US-10-706-855-4	Sequence 4, Appl
691	29	60.4	32	3	US-09-864-761-42463	Sequence 42463, A	764	29	60.4	112	5	US-10-732-923-4059	Sequence 4059, Ap
692	29	60.4	34	3	US-09-864-761-43538	Sequence 43538, A	765	29	60.4	113	4	US-10-371-942-16	Sequence 16, Appl
693	29	60.4	38	4	US-10-163-415-12	Sequence 12, Appl	766	29	60.4	113	4	US-10-437-963-183729	Sequence 183729,
694	29	60.4	38	4	US-10-424-599-280322	Sequence 280322, A	767	29	60.4	113	5	US-10-706-855-8	Sequence 8, Appl
695	29	60.4	39	3	US-09-864-761-46328	Sequence 46328, A	768	29	60.4	114	4	US-10-767-701-40300	Sequence 40300, A
696	29	60.4	39	4	US-10-424-599-145871	Sequence 145871, A	769	29	60.4	114	4	US-10-915-497-26	Sequence 26, Appl
697	29	60.4	39	4	US-10-425-115-307426	Sequence 307426, A	770	29	60.4	117	5	US-10-424-599-274720	Sequence 274720,
698	29	60.4	44	3	US-09-833-245-941	Sequence 941, App	771	29	60.4	118	4	US-10-424-599-274720	Sequence 274720,
699	29	60.4	45	4	US-10-425-115-193499	Sequence 193499, A	772	29	60.4	121	5	US-10-450-763-39581	Sequence 39581, A
700	29	60.4	49	4	US-10-437-963-137166	Sequence 137166, A	773	29	60.4	124	4	US-10-425-115-257387	Sequence 257387,
701	29	60.4	51	4	US-10-424-599-274277	Sequence 274277, A	774	29	60.4	126	4	US-10-425-115-282440	Sequence 282440,
702	29	60.4	51	4	US-10-425-115-200207	Sequence 200207, A	775	29	60.4	127	4	US-10-424-599-269231	Sequence 269231,
703	29	60.4	51	5	US-10-450-763-56589	Sequence 56589, A	776	29	60.4	128	3	US-09-755-665-28	Sequence 28, Appl
704	29	60.4	52	4	US-10-424-599-236144	Sequence 236144, A	777	29	60.4	128	4	US-10-445-641-2	Sequence 2, Appl
705	29	60.4	52	4	US-10-425-115-334231	Sequence 334231, A	778	29	60.4	128	4	US-10-629-248-28	Sequence 28, Appl
706	29	60.4	54	4	US-10-424-599-164816	Sequence 164816, A	779	29	60.4	129	3	US-09-185-245-2	Sequence 2, Appl
707	29	60.4	57	4	US-10-106-698-5786	Sequence 5786, Ap	780	29	60.4	129	4	US-09-864-761-41836	Sequence 41836, A
708	29	60.4	58	4	US-10-424-599-227377	Sequence 227377, A	781	29	60.4	129	4	US-10-177-293-180	Sequence 180, App
709	29	60.4	58	4	US-10-425-115-210651	Sequence 210651, A	782	29	60.4	129	4	US-10-767-701-40260	Sequence 40260, A
710	29	60.4	59	4	US-10-424-599-237859	Sequence 237859, A	783	29	60.4	129	4	US-10-413-600-22	Sequence 22, Appl
711	29	60.4	62	4	US-10-029-386-30836	Sequence 30836, A	784	29	60.4	133	4	US-10-156-761-15084	Sequence 15084, A
712	29	60.4	62	4	US-10-424-599-263169	Sequence 263169, A	785	29	60.4	135	5	US-10-450-763-42323	Sequence 42323, A
713	29	60.4	62	4	US-10-425-115-350466	Sequence 350466, A	786	29	60.4	138	4	US-10-425-115-295023	Sequence 295023,
714	29	60.4	63	3	US-09-925-300-1132	Sequence 1132, Ap	787	29	60.4	139	4	US-10-437-963-139444	Sequence 139444, A
715	29	60.4	64	4	US-10-424-599-272671	Sequence 272671, A	788	29	60.4	142	5	US-10-450-763-36116	Sequence 36116, A
716	29	60.4	66	4	US-10-231-417-330	Sequence 330, App	789	29	60.4	145	3	US-09-185-245-3	Sequence 3, Appl
717	29	60.4	66	4	US-10-424-599-265027	Sequence 265027, A	790	29	60.4	145	3	US-09-919-497-68	Sequence 68, Appl
718	29	60.4	66	4	US-10-377-963-145522	Sequence 145522, A	791	29	60.4	145	4	US-10-177-293-1821	Sequence 182, App
719	29	60.4	67	4	US-10-078-929-48	Sequence 48, Appl	792	29	60.4	145	4	US-10-295-027-1231	Sequence 1231, Ap
720	29	60.4	68	4	US-10-437-963-110845	Sequence 110845, A	793	29	60.4	145	4	US-10-413-600-19	Sequence 19, Appl
721	29	60.4	68	4	US-10-425-115-346536	Sequence 346536, A	794	29	60.4	145	5	US-10-723-865-1662	Sequence 1562, Ap
722	29	60.4	68	4	US-10-425-115-356824	Sequence 356824, A	795	29	60.4	147	3	US-09-735-665-32	Sequence 32, Appl
723	29	60.4	69	4	US-10-424-599-175635	Sequence 175635, A	796	29	60.4	147	4	US-10-445-641-6	Sequence 6, Appl
724	29	60.4	69	4	US-10-424-599-246024	Sequence 246024, A	797	29	60.4	147	4	US-10-629-248-32	Sequence 32, Appl
725	29	60.4	70	4	US-10-424-599-281500	Sequence 281500, A	798	29	60.4	148	4	US-10-767-701-335568	Sequence 335568, A
726	29	60.4	70	4	US-10-425-115-329349	Sequence 329349, A	799	29	60.4	151	4	US-10-437-963-118321	Sequence 118321, A
727	29	60.4	71	5	US-10-450-763-45908	Sequence 45908, A	800	29	60.4	158	4	US-10-425-114-50703	Sequence 50703, A
728	29	60.4	74	4	US-10-424-599-213945	Sequence 213945, A	801	29	60.4	159	3	US-09-764-864-1150	Sequence 1150, Ap
729	29	60.4	74	4	US-10-106-698-8001	Sequence 8001, Ap	802	29	60.4	162	4	US-10-425-115-156891	Sequence 156891, A
730	29	60.4	74	4	US-10-425-115-272971	Sequence 272971, A	803	29	60.4	170	5	US-10-450-763-42233	Sequence 42233, A
731	29	60.4	75	4	US-10-425-115-208804	Sequence 208804, A	804	29	60.4	172	3	US-09-185-245-4	Sequence 4, Appl
732	29	60.4	78	3	US-09-864-761-48441	Sequence 48441, A	805	29	60.4	172	5	US-10-314-942-4	Sequence 109057, A
733	29	60.4	78	4	US-10-424-599-248127	Sequence 248127, A	806	29	60.4	175	4	US-10-437-963-160957	Sequence 52129, A
734	29	60.4	78	4	US-10-425-115-319313	Sequence 319313, A	807	29	60.4	177	4	US-10-767-701-52129	Sequence 53069, A
735	29	60.4	79	4	US-10-424-599-184726	Sequence 184726, A	808	29	60.4	179	5	US-10-450-763-35069	Sequence 272, App
736	29	60.4	79	4	US-10-425-115-288774	Sequence 288774, A	809	29	60.4	181	4	US-10-289-763-212	Sequence 290355, A
737	29	60.4	80	4	US-10-424-599-259301	Sequence 259301, A	810	29	60.4	187	4	US-10-425-115-290355	Sequence 44562, A
738	29	60.4	80	4	US-10-767-701-62133	Sequence 62133, A	811	29	60.4	188	4	US-10-767-701-44562	Sequence 201350, A
739	29	60.4	80	4	US-10-425-115-236240	Sequence 236240, A	812	29	60.4	193	4	US-10-424-599-201330	Sequence 116412, A
740	29	60.4	83	4	US-10-413-600-25	Sequence 25, Appl	813	29	60.4	214	4	US-10-437-963-116412	Sequence 198, App
741	29	60.4	83	4	US-10-425-115-217946	Sequence 217946, A	814	29	60.4	215	4	US-10-210-172-18	Sequence 130599, A
742	29	60.4	84	3	US-09-826-734-20	Sequence 20, Appl	815	29	60.4	217	4	US-10-437-963-110559	Sequence 86, Appl
743	29	60.4	84	3	US-10-425-115-206294	Sequence 206294, A	816	29	60.4	219	5	US-10-488-074-86	Sequence 7021, Ap
744	29	60.4	86	4	US-10-425-115-365247	Sequence 365247, A	817	29	60.4	221	5	US-10-739-930-7021	Sequence 42541, A
745	29	60.4	87	4	US-10-424-599-224613	Sequence 224613, A	818	29	60.4	224	5	US-10-425-114-44541	Sequence 39908, A
746	29	60.4	87	4	US-10-437-963-146279	Sequence 146279, A	819	29	60.4	243	5	US-10-450-763-39908	Sequence 262868, A
747	29	60.4	92	4	US-10-424-599-159959	Sequence 159959, A	820	29	60.4	247	4	US-10-210-172-16	Sequence 196, App
748	29	60.4	92	4	US-10-425-115-234840	Sequence 234840, A	821	29	60.4	248	4	US-10-424-599-262868	Sequence 10955, Ap
749	29	60.4	93	4	US-10-425-115-311123	Sequence 311123, A	822	29	60.4	257	4	US-10-087-1392-1095	Sequence 263250, A
750	29	60.4	93	4	US-10-425-115-360629	Sequence 360629, A	823	29	60.4	257	4	US-10-425-115-263250	Sequence 291843, A
751	29	60.4	95	4	US-10-425-115-222834	Sequence 222834, A	824	29	60.4	258	4	US-10-425-115-291843	Sequence 5704, A
752	29	60.4	97	4	US-10-425-115-292114	Sequence 292114, A	825	29	60.4	263	5	US-10-450-763-57404	Sequence 71052, A
753	29	60.4	98	4	US-10-424-599-263109	Sequence 263109, A	826	29	60.4	263	4	US-10-425-114-71052	Sequence 171, App
754	29	60.4	98	4	US-10-425-115-296121	Sequence 296121, A	827	29	60.4	264	4	US-10-220-120-271	Sequence 28, Appl
755	29	60.4	99	4	US-10-437-963-172990	Sequence 172990, A	828	29	60.4	267	4	US-10-156-240-18	Sequence 15, Appl
756	29	60.4	100	4	US-10-194-975-77	Sequence 77, Appl	829	29	60.4	267	4	US-10-433-640-15	Sequence 2, Appl
757	29	60.4	102	4	US-10-112-944-484	Sequence 484, App	830	29	60.4	268	4	US-10-353-721-2	Sequence 2, Appl

831	29	60.4	268	4	US-10-425-114-66065	Sequence 66065, A	904	29	60.4	346	5	US-10-930-662-24	Sequence 24, Appl
832	29	60.4	275	4	US-10-127-032-129	Sequence 129, App	905	29	60.4	346	5	US-10-969-727-80	Sequence 80, Appl
833	29	60.4	275	4	US-10-425-241-1	Sequence 4, Appl1	906	29	60.4	346	5	US-10-800-249-8	Sequence 8, Appl1
834	29	60.4	275	4	US-10-282-122A-43664	Sequence 43664, A	907	29	60.4	346	6	US-11-086-846-8	Sequence 8, Appl1
835	29	60.4	275	4	US-10-389-647-624	Sequence 624, App	908	29	60.4	350	4	US-10-437-963-110455	Sequence 110455, A
836	29	60.4	275	4	US-10-425-115-314014	Sequence 314014, A	909	29	60.4	352	4	US-10-210-172-192	Sequence 192, App
837	29	60.4	276	4	US-10-437-963-135927	Sequence 135927, A	910	29	60.4	353	5	US-10-732-923-7815	Sequence 7815, Ap
838	29	60.4	279	4	US-10-424-599-235949	Sequence 235949, A	911	29	60.4	354	5	US-10-732-923-7674	Sequence 7674, Ap
839	29	60.4	279	4	US-10-425-114-49842	Sequence 49842, A	912	29	60.4	371	4	US-10-437-963-191907	Sequence 191907, A
840	29	60.4	281	5	US-10-425-115-289817	Sequence 289817, A	913	29	60.4	373	4	US-10-669-161-32	Sequence 32, Appl
841	29	60.4	281	5	US-10-450-763-50215	Sequence 50215, A	914	29	60.4	373	4	US-10-425-115-265709	Sequence 265709, A
842	29	60.4	282	4	US-10-437-963-113001	Sequence 113001, A	915	29	60.4	379	4	US-10-437-963-165621	Sequence 165621, A
843	29	60.4	283	3	US-09-846-5908-6	Sequence 6, Appl1	916	29	60.4	379	5	US-10-450-763-46591	Sequence 46691, A
844	29	60.4	285	3	US-09-883-758-4	Sequence 4, Appl1	917	29	60.4	380	4	US-10-282-122A-48622	Sequence 48622, A
845	29	60.4	282	5	US-10-450-763-35966	Sequence 35966, A	918	29	60.4	380	4	US-10-425-115-305926	Sequence 305926, A
846	29	60.4	292	3	US-09-782-974C-12	Sequence 12, Appl	919	29	60.4	395	4	US-10-424-599-262871	Sequence 262871, A
847	29	60.4	286	4	US-10-467-92A-12	Sequence 286151, A	920	29	60.4	395	5	US-10-450-763-54006	Sequence 54006, A
848	29	60.4	286	5	US-10-467-92A-12	Sequence 12, Appl	921	29	60.4	405	5	US-10-450-763-60689	Sequence 60689, A
849	29	60.4	296	5	US-10-975-979-12	Sequence 12, Appl	922	29	60.4	405	5	US-10-353-721-15	Sequence 15, Appl
850	29	60.4	296	5	US-10-969-127-12	Sequence 12, Appl	923	29	60.4	409	4	US-10-353-721-14	Sequence 14, Appl
851	29	60.4	305	4	US-10-188-012-5	Sequence 5, Appl1	924	29	60.4	409	4	US-10-424-599-260985	Sequence 260985, A
852	29	60.4	305	4	US-10-188-012-7	Sequence 7, Appl1	925	29	60.4	409	4	US-10-425-114-63843	Sequence 63843, A
853	29	60.4	305	5	US-10-663-497-5	Sequence 5, Appl1	926	29	60.4	426	5	US-10-450-763-31247	Sequence 31247, A
854	29	60.4	305	5	US-10-663-497-5	Sequence 7, Appl1	927	29	60.4	431	4	US-10-437-963-164992	Sequence 164992, A
855	29	60.4	307	4	US-10-425-115-305931	Sequence 305931, A	928	29	60.4	434	4	US-10-425-114-71857	Sequence 71857, A
856	29	60.4	308	4	US-10-017-161-768	Sequence 768, App	929	29	60.4	439	3	US-09-841-132-524	Sequence 524, App
857	29	60.4	314	4	US-10-210-172-186	Sequence 186, App	930	29	60.4	439	5	US-10-872-155-524	Sequence 524, App
858	29	60.4	314	5	US-10-635-398-88	Sequence 88, Appl	931	29	60.4	441	4	US-10-425-115-211265	Sequence 211265, A
859	29	60.4	319	4	US-10-329-079-57	Sequence 57, Appl	932	29	60.4	441	4	US-10-282-122A-48623	Sequence 48623, A
860	29	60.4	320	4	US-10-210-172-190	Sequence 190, App	933	29	60.4	446	4	US-10-282-122A-48623	Sequence 17, Appl
861	29	60.4	320	4	US-10-210-172-194	Sequence 194, App	934	29	60.4	448	4	US-10-156-240-17	Sequence 1114, Ap
862	29	60.4	320	5	US-10-635-398-80	Sequence 80, Appl	935	29	60.4	448	4	US-10-289-762-1114	Sequence 236752, A
863	29	60.4	320	5	US-10-635-398-80	Sequence 92, Appl	936	29	60.4	448	4	US-10-424-599-236752	Sequence 53372, A
864	29	60.4	327	4	US-10-425-114-11026	Sequence 41026, A	937	29	60.4	454	4	US-10-425-114-55319	Sequence 55319, A
865	29	60.4	327	5	US-10-450-763-40957	Sequence 40957, A	938	29	60.4	464	5	US-10-450-763-36319	Sequence 36319, A
866	29	60.4	329	4	US-10-424-599-61201	Sequence 161201, A	939	29	60.4	476	4	US-10-017-161-758	Sequence 758, App
867	29	60.4	342	4	US-10-092-135-2	Sequence 2, Appl1	940	29	60.4	476	4	US-10-425-114-45606	Sequence 45606, A
868	29	60.4	345	5	US-10-635-398-84	Sequence 94, Appl	941	29	60.4	488	4	US-10-425-115-287930	Sequence 287930, A
869	29	60.4	345	3	US-09-862-274-2	Sequence 2, Appl1	942	29	60.4	488	4	US-10-425-115-287931	Sequence 38808, A
870	29	60.4	346	3	US-09-947-374-2	Sequence 2, Appl1	943	29	60.4	491	5	US-10-450-763-38808	Sequence 62637, A
871	29	60.4	346	3	US-09-886-041-2	Sequence 2, Appl1	944	29	60.4	491	4	US-10-425-114-62617	Sequence 62637, A
872	29	60.4	346	3	US-09-782-974C-80	Sequence 80, Appl	945	29	60.4	492	4	US-10-425-114-65253	Sequence 65253, A
873	29	60.4	346	4	US-10-094-417-8	Sequence 2, Appl1	946	29	60.4	492	4	US-10-450-763-43852	Sequence 43852, A
874	29	60.4	346	4	US-10-188-149A-2	Sequence 18, Appl	947	29	60.4	497	5	US-10-437-963-115293	Sequence 115293, A
875	29	60.4	346	4	US-10-079-384-18	Sequence 2, Appl1	948	29	60.4	499	4	US-10-437-963-157564	Sequence 157564, A
876	29	60.4	346	4	US-10-240-842-2	Sequence 660, App	949	29	60.4	504	4	US-10-437-963-157560	Sequence 157560, A
877	29	60.4	346	4	US-10-225-567A-668	Sequence 660, App	950	29	60.4	506	4	US-10-437-963-157560	Sequence 157560, A
878	29	60.4	346	4	US-10-201-481-7	Sequence 7, Appl1	951	29	60.4	510	4	US-10-437-963-177611	Sequence 177611, A
879	29	60.4	346	4	US-10-278-141-3	Sequence 24, Appl1	952	29	60.4	511	5	US-10-450-763-49855	Sequence 49855, A
880	29	60.4	346	4	US-10-321-807-24	Sequence 2, Appl1	953	29	60.4	525	4	US-10-437-963-110482	Sequence 110482, A
881	29	60.4	346	4	US-10-076-260-2	Sequence 2, Appl1	954	29	60.4	525	4	US-10-425-115-210172	Sequence 210172, A
882	29	60.4	346	4	US-10-044-643-2	Sequence 5, Appl1	955	29	60.4	528	4	US-10-450-763-8284	Sequence 8284, Ap
883	29	60.4	346	4	US-10-044-643-5	Sequence 3, Appl1	956	29	60.4	612	4	US-10-369-493-377	Sequence 377, App
884	29	60.4	346	4	US-10-296-081-3	Sequence 178, App	957	29	60.4	557	6	US-11-097-143-135603	Sequence 135603, A
885	29	60.4	346	4	US-10-210-172-178	Sequence 180, App	958	29	60.4	568	4	US-10-424-599-235960	Sequence 235960, A
886	29	60.4	346	4	US-10-210-172-180	Sequence 182, App	959	29	60.4	574	4	US-10-156-761-11442	Sequence 11462, A
887	29	60.4	346	4	US-10-210-172-182	Sequence 184, App	960	29	60.4	584	5	US-10-505-886-88	Sequence 86, Appl
888	29	60.4	346	4	US-10-210-172-184	Sequence 188, App	961	29	60.4	586	5	US-10-450-763-14991	Sequence 34991, A
889	29	60.4	346	4	US-10-343-650A-8	Sequence 8, Appl	962	29	60.4	612	4	US-10-369-493-8284	Sequence 8284, Ap
890	29	60.4	346	4	US-10-332-032-1	Sequence 2, Appl1	963	29	60.4	618	5	US-10-450-763-65180	Sequence 46180, A
891	29	60.4	346	4	US-10-665-956-2	Sequence 1, Appl1	964	29	60.4	623	4	US-10-425-114-33177	Sequence 43177, A
892	29	60.4	346	4	US-10-321-807-24	Sequence 24, Appl	965	29	60.4	641	4	US-10-262-666-8	Sequence 8, Appl1
893	29	60.4	346	4	US-10-314-048A-24	Sequence 6, Appl1	966	29	60.4	641	5	US-10-511-362-15	Sequence 15, Appl1
894	29	60.4	346	4	US-10-482-151-6	Sequence 24, Appl	967	29	60.4	641	5	US-10-450-763-50972	Sequence 50972, A
895	29	60.4	346	5	US-10-897-815-24	Sequence 24, Appl	968	29	60.4	641	5	US-10-450-763-51143	Sequence 51143, A
896	29	60.4	346	5	US-10-635-398-78	Sequence 78, Appl	969	29	60.4	670	5	US-10-450-763-8809	Sequence 38809, A
897	29	60.4	346	5	US-10-635-398-82	Sequence 82, Appl	970	29	60.4	670	5	US-10-450-763-92021	Sequence 92021, A
898	29	60.4	346	5	US-10-635-398-84	Sequence 84, Appl	971	29	60.4	698	5	US-10-437-963-178458	Sequence 178458, A
899	29	60.4	346	5	US-10-635-398-86	Sequence 86, Appl	972	29	60.4	704	4	US-10-424-599-250568	Sequence 250568, A
900	29	60.4	346	5	US-10-635-398-90	Sequence 90, Appl	973	29	60.4	714	4	US-10-425-114-18610	Sequence 38610, A
901	29	60.4	346	5	US-10-467-492A-80	Sequence 80, Appl	974	29	60.4	720	4	US-10-450-763-11640	Sequence 41640, A
902	29	60.4	346	5	US-10-975-979-80	Sequence 80, Appl	975	29	60.4	728	5	US-10-450-763-11640	Sequence 41640, A
903	29	60.4	346	5	US-10-975-979-80	Sequence 80, Appl	976	29	60.4	733	5	US-10-739-930-6480	Sequence 6480, Ap

```
977 29 60.4 735 4 US-10-262-666-66 Sequence 66, Appl
978 29 60.4 735 5 US-10-511-362-8 Sequence 8, Appl
979 29 60.4 737 5 US-10-511-362-6 Sequence 6, Appl
980 29 60.4 740 5 US-10-450-763-35476 Sequence 35476, A
981 29 60.4 744 4 US-10-262-666-64 Sequence 64, Appl
982 29 60.4 757 5 US-10-450-763-37767 Sequence 37767, A
983 29 60.4 791 5 US-10-450-763-53910 Sequence 53910, A
984 29 60.4 801 4 US-10-425-115-273564 Sequence 273564, A
985 29 60.4 813 4 US-10-425-114-50901 Sequence 50901, A
986 29 60.4 831 5 US-10-450-763-47541 Sequence 47541, A
987 29 60.4 835 6 US-11-097-143-21810 Sequence 21810, A
988 29 60.4 846 5 US-10-450-763-38213 Sequence 38213, A
989 29 60.4 854 5 US-10-450-763-38803 Sequence 38803, A
990 29 60.4 888 5 US-10-450-763-34345 Sequence 34345, A
991 29 60.4 888 5 US-10-450-763-39048 Sequence 39048, A
992 29 60.4 888 5 US-10-450-763-50278 Sequence 50278, A
993 29 60.4 891 5 US-10-732-923-14985 Sequence 14985, A
994 29 60.4 915 5 US-10-450-763-36628 Sequence 36628, A
995 29 60.4 918 4 US-10-437-963-110488 Sequence 110488, A
996 29 60.4 938 5 US-10-450-763-40801 Sequence 40801, A
997 29 60.4 941 4 US-10-437-963-189199 Sequence 189199, A
998 29 60.4 944 6 US-11-097-143-9729 Sequence 9729, Ap
999 29 60.4 967 5 US-10-732-923-14984 Sequence 14984, A
1000 29 60.4 993 5 US-10-450-763-39028 Sequence 39028, A
```

ALIGNMENTS

RESULT 1

```
US-10-161-097-41
; Sequence 41, Application US/10161097
; Publication No. US20030096404A1
; GENERAL INFORMATION:
; APPLICANT: ROSENZWEIG, Michael
; APPLICANT: PYKETT, Mark J.
; APPLICANT: SCADDEN, David T.
; APPLICANT: POZNANSKY, Mark C.
; TITLE OF INVENTION: LYMPHOID TISSUE-SPECIFIC CELL PRODUCTION
; TITLE OF INVENTION: FROM HEMATOPOIETIC PROGENITOR CELLS IN THREE-DIMENSIONAL
; TITLE OF INVENTION: DEVICES
; FILE REFERENCE: C1005/7012/KA/ERG
; CURRENT APPLICATION NUMBER: US/10/161,097
; CURRENT FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: US/09/574,749
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: US 60/107,972
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: PCT/US99/26795
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: US 09/524,749
; PRIOR FILING DATE: 2000-05-18
; NUMBER OF SEQ ID NOS: 58
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 41
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Papilloma source
US-10-161-097-41
```

```
Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 RLCVOSTHV 9

DB 1 RLCVOSTHV 9

```
RESULT 2
US-10-133-210-274
```

```
; Sequence 274, Application US/10133210
; Publication No. US20030103964A1
; GENERAL INFORMATION:
; APPLICANT: Delisi, Charles
; APPLICANT: Berzofsky, Jay
; APPLICANT: Gulokota, Kamalaker
; APPLICANT: Vaccaro, Dennis
; APPLICANT: Wang, Zhiping
; APPLICANT: Zhang, Chao
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND
; TITLE OF INVENTION: COMPOSITIONS THEREOF
; FILE REFERENCE: BU-035AX
; CURRENT APPLICATION NUMBER: US/10/133,210
; CURRENT FILING DATE: 2002-04-26
; NUMBER OF SEQ ID NOS: 281
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 274
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-133-210-274
```

```
Query Match 100.0%; Score 48; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 RLCVOSTHV 9

DB 1 RLCVOSTHV 9

RESULT 3

```
US-10-484-063-16
; Sequence 16, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILLERMO
; APPLICANT: FOLLEN, MICHAEL
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-16
```

```
Query Match 100.0%; Score 48; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 RLCVOSTHV 9

DB 1 RLCVOSTHV 9

```
RESULT 4
US-09-891-823-17
; Sequence 17, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
```

```

; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-891-823-17
```

```
Query Match          100.0%; Score 48; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 RLCVQSTHV 9
Db 2 RLCVQSTHV 10
```

```

RESULT 5
US-10-365-908-17
; Sequence 17, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-17

Query Match          100.0%; Score 48; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 RLCVQSTHV 9
Db 2 RLCVQSTHV 10
```

```

RESULT 6
US-10-871-138-17
; Sequence 17, Application US/10871138
; Publication No. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
```

```

; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; CURRENT FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-871-138-17
```

```
Query Match          100.0%; Score 48; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 RLCVQSTHV 9
Db 2 RLCVQSTHV 10
```

```

RESULT 7
US-10-648-547-77
; Sequence 77, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mittelman, Abraham
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 77
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-77
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 RLCVQSTHV 9
Db 1 RLCVQSTHV 9
```

```

RESULT 8
US-10-648-547-83
; Sequence 83, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mittelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
```



```

; SEQ ID NO 83
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-83
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
Db      5 RLCVOSTHV 13
```

```
RESULT 9
US-10-648-547-89
; Sequence 89, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 89
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-89
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
Db      6 RLCVOSTHV 14
```

```
RESULT 10
US-10-648-547-93
; Sequence 93, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 93
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-93
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
Db      7 RLCVOSTHV 15
```

```
RESULT 11
US-10-648-547-94
; Sequence 94, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 94
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-94
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
Db      4 RLCVOSTHV 12
```

```
RESULT 12
US-10-476-570-16
; Sequence 16, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVILLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; TITLE OF INVENTION: papillomavirus proteins and uses thereof
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 60-74
US-10-476-570-16
```

```
Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```


Db 7 RLCVOSTHV 15

```

RESULT 13
US-10-476-570-48
; Sequence 48, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MILIERE, Bernard
; APPLICANT: BOUGAULT-VILLADA, Isabelle
; APPLICANT: BOUGAULT-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; TITLE OF INVENTION: papillomavirus proteins and uses thereof
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; PRIOR FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 48
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 65-79
US-10-476-570-48

```

Query Match 100.0%; Score 48; DB 4; Length 15;
 Best Local Similarity 100.0%; Pred. No. 0.064;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
 Db 2 RLCVOSTHV 10

```

RESULT 14
US-10-306-541-77
; Sequence 77, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittleman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; PRIOR FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 77
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-77

```

Query Match 100.0%; Score 48; DB 4; Length 15;
 Best Local Similarity 100.0%; Pred. No. 0.064;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
 Db 1 RLCVOSTHV 9

```

RESULT 15
US-10-306-541-83
; Sequence 83, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittleman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; PRIOR FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 83
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-83

```

Query Match 100.0%; Score 48; DB 4; Length 15;
 Best Local Similarity 100.0%; Pred. No. 0.064;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
 Db 5 RLCVOSTHV 13

```

RESULT 16
US-10-306-541-89
; Sequence 89, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittleman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; PRIOR FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 89
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-89

```

Query Match 100.0%; Score 48; DB 4; Length 15;
 Best Local Similarity 100.0%; Pred. No. 0.064;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
 Db 6 RLCVOSTHV 14

```

RESULT 17
US-10-306-541-93
; Sequence 93, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittleman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; PRIOR FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23

```

```

; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 93
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-93
```

```

Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
         |||||
Db       7 RLCVOSTHV 15
```

```

RESULT 18
US-10-306-541-94
; Sequence 94, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mittleman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 94
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-94
```

```

Query Match          100.0%; Score 48; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
         |||||
Db       4 RLCVOSTHV 12
```

```

RESULT 19
US-10-355-268-16
; Sequence 16, Application US/10355268
; Publication No. US20030211996A1
; GENERAL INFORMATION:
; APPLICANT: GOMANS, Eric J.
; TITLE OF INVENTION: IMPROVED VIRUS LIKE PARTICLES BASED ON SMALL ENVELOPE PROTEIN PRO
; FILE REFERENCE: P078480S00/BAS
; CURRENT APPLICATION NUMBER: US/10/355,268
; CURRENT FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: PCT/AU01/00935
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: AU PQ9120
; PRIOR FILING DATE: 2000-07-31
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 16
; LENGTH: 18
; TYPE: PRT
; ORGANISM: Hepatitis B virus
US-10-355-268-16
```

```

Query Match          100.0%; Score 48; DB 4; Length 18;
Best Local Similarity 100.0%; Pred. No. 0.076;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY      1 RLCVOSTHV 9
         |||||
Db       5 RLCVOSTHV 13
```

```

RESULT 20
US-09-888-721-7
; Sequence 7, Application US/09888721
; Patent No. US20020132990A1
; GENERAL INFORMATION:
; APPLICANT: Huston, James S.
; APPLICANT: Wils, Pierre
; APPLICANT: Zhu, Quan
; APPLICANT: Laurent, Olivier
; APPLICANT: Marasco, Wayne A.
; APPLICANT: Scherman, Daniel
; TITLE OF INVENTION: BIOENGINEERED VEHICLES FOR TARGETED NUCLEIC ACID
; FILE REFERENCE: 23611-A USA
; CURRENT APPLICATION NUMBER: US/09/888,721
; CURRENT FILING DATE: 2001-06-25
; PRIOR APPLICATION NUMBER: 60/213,653
; PRIOR FILING DATE: 2000-06-23
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-09-888-721-7
```

```

Query Match          100.0%; Score 48; DB 3; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.08;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
         |||||
Db       7 RLCVOSTHV 15
```

```

RESULT 21
US-10-668-400-9
; Sequence 9, Application US/10668400
; Publication No. US20040058859A1
; GENERAL INFORMATION:
; APPLICANT: Bay, Sylvie
; APPLICANT: Cantacuzene, Daniele
; APPLICANT: Leclerc, Claude
; APPLICANT: Lo-Man, Richard
; TITLE OF INVENTION: MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,
; FILE REFERENCE: 102.166A-1
; CURRENT APPLICATION NUMBER: US/10/668,400
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: US 09/049,847
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: US 60/041,726
; PRIOR FILING DATE: 1997-03-27
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; FEATURE:
; NAME/KEY: MISC FEATURE
; OTHER INFORMATION: HPV 16 E7 PEPTIDE
US-10-668-400-9
```

```

Query Match          100.0%; Score 48; DB 4; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.08;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

OY 1 RLCVOSTHV 9
| | | | |
Db 7 RLCVOSTHV 15

RESULT 22
US-10-479-541-1
; Sequence 1, Application US/10479541
; Publication No. US20040151723A1
; GENERAL INFORMATION:
; APPLICANT: Kirin Beer Kabushiki Kaisha
; TITLE OF INVENTION: Novel E7 antigen epitope from human papillomavirus and
; TITLE OF INVENTION: CD4+ T cells activated thereby
; FILE REFERENCE: 137240PX
; CURRENT APPLICATION NUMBER: US/10/479,541
; CURRENT FILING DATE: 2003-12-04
; PRIOR APPLICATION NUMBER: 173803/2001
; PRIOR FILING DATE: 2001-06-08
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-479-541-1

Query Match 100.0%; Score 48; DB 4; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.084; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0;

OY 1 RLCVOSTHV 9
| | | | |
Db 5 RLCVOSTHV 13

RESULT 23
US-09-828-645-4
; Sequence 4, Application US/09828645
; Publication No. US20030027750A1
; GENERAL INFORMATION:
; APPLICANT: Hu, Yao Xiong
; TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
; FILE REFERENCE: 146-1-002
; CURRENT APPLICATION NUMBER: US/09/828,645
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: US 60/194,796
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from the E7 early region of HPV-16
US-09-828-645-4

Query Match 100.0%; Score 48; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.084; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0;

OY 1 RLCVOSTHV 9
| | | | |
Db 6 RLCVOSTHV 14

RESULT 24
US-10-432-465-49
; Sequence 49, Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John

; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and their Use in Diagnosis and
; TITLE OF INVENTION: Therapy
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; CURRENT FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-49

Query Match 100.0%; Score 48; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.084; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0;

OY 1 RLCVOSTHV 9
| | | | |
Db 11 RLCVOSTHV 19

RESULT 25
US-10-890-526-74
; Sequence 74, Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Joehmus, Ingrid
; APPLICANT: Nieland, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; CURRENT FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-74

Query Match 100.0%; Score 48; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.084; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0;

OY 1 RLCVOSTHV 9
| | | | |
Db 11 RLCVOSTHV 19

RESULT 26
US-10-827-007-4
; Sequence 4, Application US/10827007
; Publication No. US20050042599A1
; GENERAL INFORMATION:
; APPLICANT: Impact Diagnostics
; APPLICANT: Hu, Yao Xiong

APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 17
LENGTH: 23
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E7 65-87
US-10-476-570-17

Query Match 100.0%; Score 48; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 6 RLCVOSTHV 14

RESULT 27
US-10-827-083-4
Sequence 4; Application US/10827083
Publication No. US20050042600A1
GENERAL INFORMATION:
APPLICANT: Impact Diagnostics
APPLICANT: Hu, Yao Xiong
TITLE OF INVENTION: Immunological Methodology for Discerning Human Papillomavirus
TITLE OF INVENTION: Contemplating Peptides from the E7 Early Coding Region of HPV 16
FILE REFERENCE: 3352-2-1-4
CURRENT APPLICATION NUMBER: US/10/827,083
CURRENT FILING DATE: 2004-04-19
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: US 60/194,796
PRIOR FILING DATE: 2000-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.2
SEQ ID NO: 4
LENGTH: 20
TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: Derived from the E7 early coding region of HPV-16
US-10-827-007-4

Query Match 100.0%; Score 48; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.084;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 6 RLCVOSTHV 14

RESULT 28
US-10-476-570-17
Sequence 17; Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAUT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra

APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from B6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 17
LENGTH: 23
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E7 65-87
US-10-476-570-17

Query Match 100.0%; Score 48; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 2 RLCVOSTHV 10

RESULT 29
US-09-728-466-1
Sequence 1; Application US/09728466
Patent No. US20010029022A1
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Manxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO: 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match 100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 30
US-09-820-765-4
Sequence 4; Application US/09820765
Publication No. US20020039584A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALBER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington

```
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,765
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-765-4

Query Match      100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
Db      66 RLCVQSTHV 74

RESULT 31
US-09-824-017-4
; Sequence 4, Application US/09824017
; Publication No. US20020197668A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALBEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017
FILING DATE: 03-Apr-2001
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
```

```
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match      100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
Db      66 RLCVQSTHV 74

RESULT 32
US-09-986-118A-4
; Sequence 4, Application US/09986118A
; Publication No. US20030021806A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALBEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. US20030021806A1-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match      100.0%; Score 48; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
Db      66 RLCVQSTHV 74
```

```
RESULT 33
US-10-267-311-8
; Sequence 8, Application US/10267311
; Publication No. US20030050469A1
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; PRIOR FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match          100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
   |||||
   |||||
Db 66 RLCVOSTHV 74

RESULT 34
US-10-177-390-8
; Sequence 8, Application US/10177390
; Publication No. US20030143743A1
; GENERAL INFORMATION:
; APPLICANT: Schuler, Gerold
; APPLICANT: N.V. Antwerp Innovatencentrum
; TITLE OF INVENTION: Improved transfection of Eucaryotic Cells with Linear
; FILE REFERENCE: 021505w/JH/ml
; CURRENT APPLICATION NUMBER: US/10/177,390
; PRIOR FILING DATE: 2002-06-20
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: fragment of
; OTHER INFORMATION: human papilloma virus type 16 E7 gene
US-10-177-390-8

Query Match          100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
   |||||
   |||||
Db 66 RLCVOSTHV 74

RESULT 35
US-10-201-764-19
; Sequence 19, Application US/10201764
; Publication No. US20030166140A1
```

```
; GENERAL INFORMATION:
; APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
; TITLE OF INVENTION: IMMUNE RESPONSE
; FILE REFERENCE: TBA
; CURRENT APPLICATION NUMBER: US/10/201,764
; CURRENT FILING DATE: 2002-07-22
; PRIOR APPLICATION NUMBER: US/09/566,420
; PRIOR FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: 60/132,752
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: 60/132,750
; PRIOR FILING DATE: 1999-05-06
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 98
; TYPE: PRF
; ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match          100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
   |||||
   |||||
Db 66 RLCVOSTHV 74

RESULT 36
US-10-392-113-29
; Sequence 29, Application US/10392113
; Publication No. US2003022493A1
; GENERAL INFORMATION:
; APPLICANT: Deluy, Laurent
; APPLICANT: Land, Hartmut
; TITLE OF INVENTION: COMPOSITIONS THAT INHIBIT PROLIFERATION
; TITLE OF INVENTION: OF CANCER CELLS
; FILE REFERENCE: 21108.0005U3
; CURRENT APPLICATION NUMBER: US/10/392,113
; PRIOR FILING DATE: 2003-03-17
; PRIOR APPLICATION NUMBER: 60/365,078
; PRIOR FILING DATE: 2002-03-15
; PRIOR APPLICATION NUMBER: PCT/US01/32127
; PRIOR FILING DATE: 2001-10-15
; PRIOR APPLICATION NUMBER: 60/239,705
; PRIOR FILING DATE: 2000-10-12
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29
; LENGTH: 98
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Note =
; OTHER INFORMATION: Synthetic Construct
US-10-392-113-29

Query Match          100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
   |||||
   |||||
Db 66 RLCVOSTHV 74

RESULT 37
US-10-654-129-4
; Sequence 4, Application US/10654129
; Publication No. US2004008161A1
; GENERAL INFORMATION:
```

```
APPLICANT: BURGER, Alexander
            HALLER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017
FILING DATE: 03-Apr-2001
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-654-129-4

Query Match      100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
Db      66 RLCVQSTHV 74

RESULT 38
US-10-681-410-19
Sequence 19, Application US/10681410
Publication No. US20040096426A1
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/681,410
CURRENT FILING DATE: 2003-10-06
PRIORITY APPLICATION NUMBER: US/10/201,764
PRIORITY FILING DATE: 2002-07-22
PRIORITY APPLICATION NUMBER: US/09/566,420
PRIORITY FILING DATE: 2000-05-05
PRIORITY APPLICATION NUMBER: 60/132,752
PRIORITY FILING DATE: 1999-05-06
PRIORITY APPLICATION NUMBER: 60/132,750
PRIORITY FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
```

```
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-10-681-410-19

Query Match      100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
Db      66 RLCVQSTHV 74

RESULT 39
US-10-772-988-3
Sequence 3, Application US/10772988
Publication No. US20040139485A1
GENERAL INFORMATION:
APPLICANT: Thorgeirsson, Snorri S.
APPLICANT: Wolbach, Joseph T.
TITLE OF INVENTION: CDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTE
FILE REFERENCE: 11613.29USM1
CURRENT APPLICATION NUMBER: US/10/772,988
CURRENT FILING DATE: 2004-02-05
PRIORITY APPLICATION NUMBER: US/09/637,746
PRIORITY FILING DATE: 2000-08-11
PRIORITY APPLICATION NUMBER: PCT/US99/04142
PRIORITY FILING DATE: 1999-02-25
PRIORITY APPLICATION NUMBER: US 60/079,567
PRIORITY FILING DATE: 1998-03-27
PRIORITY APPLICATION NUMBER: US 60/075,922
PRIORITY FILING DATE: 1998-02-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-772-988-3

Query Match      100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
Db      66 RLCVQSTHV 74

RESULT 40
US-10-479-541-5
Sequence 5, Application US/10479541
Publication No. US20040151723A1
GENERAL INFORMATION:
APPLICANT: Kirin Beer Kabushiki Kaisha
TITLE OF INVENTION: Novel E7 antigen epitope from human papillomavirus and
FILE REFERENCE: 137240PX
CURRENT APPLICATION NUMBER: US/10/479,541
CURRENT FILING DATE: 2003-12-04
PRIORITY APPLICATION NUMBER: 173803/2001
PRIORITY FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 5
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-479-541-5
```

Query Match 100.0%; Score 48; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 41

US-10-042-526A-4
; Sequence 4, Application US/10042526A
; Publication No. US20050031636A1
; GENERAL INFORMATION:
; APPLICANT: GISSMANN, et al.
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
; FILE REFERENCE: 27013/38150
; CURRENT APPLICATION NUMBER: US/10/042,526A
; PRIOR FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: US 09/632,286
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: US 08/944,368
; PRIOR FILING DATE: 1997-10-06
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 4
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papilloma Virus
US-10-042-526A-4

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 42

US-10-657-399-1
; Sequence 1, Application US/10657399
; Publication No. US20050032038A1
; GENERAL INFORMATION:
; APPLICANT: Fisher, Christopher
; APPLICANT: He, Manxia
; TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
; FILE REFERENCE: 28341/6216
; CURRENT APPLICATION NUMBER: US/10/657,399
; PRIOR FILING DATE: 2003-09-08
; PRIOR APPLICATION NUMBER: US/09/728,466
; PRIOR FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: 09/382,616
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Papillomavirus sylvylagi
US-10-657-399-1

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 43

US-10-858-384-12
; Sequence 12, Application US/10858384
; Publication No. US20050033025A1
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
; TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
; FILE REFERENCE: 0508-1037-1
; CURRENT APPLICATION NUMBER: US/10/858,384
; PRIOR FILING DATE: 2004-06-02
; PRIOR APPLICATION NUMBER: FR 9907012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 12
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-858-384-12

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 44

US-10-484-063-26
; Sequence 26, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILTERMO
; APPLICANT: FOLLEN, MICHELE
; TITLE OF INVENTION: PRE-CANCEROUS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-484-063-26

Query Match 100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 45
US-10-343-448-5
; Sequence 5, Application US/10343448
; Publication No. US20050054820A1
; GENERAL INFORMATION:


```

; APPLICANT: MU, Tzyy-Chouu
; APPLICANT: HUNG, Chien-Fu
; TITLE OF INVENTION: MOLECULAR VACCINE LINKING AN ENDOPLASMIC RETICULUM CHAPERONE
; TITLE OF INVENTION: POLYPEPTIDE TO AN ANTIGEN
; FILE REFERENCE: 2240-186463
; CURRENT APPLICATION NUMBER: US/10/343,448
; PRIOR FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: PCT/US01/24134
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: US 60/222,902
; PRIOR FILING DATE: 2000-08-03
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus
; US-10-343-448-5
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTHV 74
```

```

RESULT 46
; US-10-679-956-8
; Sequence 8, Application US/10679956
; Publication No. US20050089841A1
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/679,956
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
; US-10-679-956-8
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTHV 74
```

```

RESULT 47
; US-10-367-057-17
; Sequence 17, Application US/10367057
; Publication No. US20050100554A1
; GENERAL INFORMATION:
; APPLICANT: Cuthill, Scott;
; APPLICANT: Jackson, Amanda;
; APPLICANT: Lewin, David A.;
; APPLICANT: Ooi, Chuan Eng
; TITLE OF INVENTION: Complexes and Methods of Using Same
```

```

; FILE REFERENCE: 21402-559
; CURRENT APPLICATION NUMBER: US/10/367,057
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 60/256,911
; PRIOR FILING DATE: 2002-02-14
; NUMBER OF SEQ ID NOS: 198
; SOFTWARE: CuraseqList version 0.1
; SEQ ID NO 17
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-367-057-17
```

```
Query Match          100.0%; Score 48; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTHV 74
```

```

RESULT 48
; US-11-077-939-5
; Sequence 5, Application US/11077939
; Publication No. US20050196865A1
; GENERAL INFORMATION:
; APPLICANT: Frazer, Ian Hector
; TITLE OF INVENTION: Gene Expression System Based on Codon Translation Efficiency
; FILE REFERENCE: 10338-11U1
; CURRENT APPLICATION NUMBER: US/11/077,939
; CURRENT FILING DATE: 2005-03-11
; PRIOR APPLICATION NUMBER: PCT/AU2003/001200
; PRIOR FILING DATE: 2003-09-12
; PRIOR APPLICATION NUMBER: US 60/410410
; PRIOR FILING DATE: 2002-09-13
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 5
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; US-11-077-939-5
```

```
Query Match          100.0%; Score 48; DB 6; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTHV 74
```

```

RESULT 49
; US-10-115-440-7
; Sequence 7, Application US/10115440
; Publication No. US20040086845A1
; GENERAL INFORMATION:
; APPLICANT: MU, Tzyy-Chouu
; APPLICANT: HUNG, Chien-Fu
; TITLE OF INVENTION: SUPERIOR MOLECULAR VACCINE LINKING THE TRANSLOCATION DOMAIN OF A
; TITLE OF INVENTION: BACTERIAL TOXIN TO AN ANTIGEN
; FILE REFERENCE: 02240-179934
; CURRENT APPLICATION NUMBER: US/10/115,440
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: US 60/281,003
; PRIOR FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: PCT/US00/41422
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: US 09/501,097
; PRIOR FILING DATE: 2000-02-09
; PRIOR APPLICATION NUMBER: US 09/421,608
; PRIOR FILING DATE: 1999-10-20
```

```
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 7
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-115-440-7
```

```
Query Match 100.0%; Score 48; DB 4; Length 99;
Best Local Similarity 100.0%; Pred. No. 0.38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
|||
Db 66 RLCVOSTHV 74
```

```
RESULT 50
US-10-472-724-4
; Sequence 4, Application US/10472724
; Publication No. US20040171806A1
; GENERAL INFORMATION:
; APPLICANT: Cid-Arregui, Angel
; APPLICANT: Zur Haegen, Harald
; TITLE OF INVENTION: Modified HPV E6 and E7 genes and proteins useful for vaccination
; FILE REFERENCE: 4121-154
; CURRENT APPLICATION NUMBER: US/10/472,724
; CURRENT FILING DATE: 2003-09-17
; PRIOR APPLICATION NUMBER: PCT/EP02/03271
; PRIOR FILING DATE: 2002-03-22
; PRIOR APPLICATION NUMBER: EP 01107271.7
; PRIOR FILING DATE: 2001-03-23
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 4
; LENGTH: 111
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-472-724-4
```

```
Query Match 100.0%; Score 48; DB 4; Length 111;
Best Local Similarity 100.0%; Pred. No. 0.43;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
|||
Db 71 RLCVOSTHV 79
```

```
Search completed: May 5, 2006, 08:17:43
Job time : 62.8 secs
```

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:08:06 ; Search time 8.4 Seconds
(without alignments)
49.591 Million cell updates/sec

Title: US-08-170-344-16
Perfect score: 48
Sequence: 1 RLCVQSTHV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues
Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :

1: Published Applications_AA_New:*
2: /SIDS5/ptodata/1/pubpaa/US08_NEW_PUB.pep1:*
3: /SIDS5/ptodata/1/pubpaa/US06_NEW_PUB.pep1:*
4: /SIDS5/ptodata/1/pubpaa/US07_NEW_PUB.pep1:*
5: /SIDS5/ptodata/1/pubpaa/US08_NEW_PUB.pep1:*
6: /SIDS5/ptodata/1/pubpaa/US09_NEW_PUB.pep1:*
7: /SIDS5/ptodata/1/pubpaa/US09_NEW_PUB.pep1:*
8: /SIDS5/ptodata/1/pubpaa/US10_NEW_PUB.pep1:*
9: /SIDS5/ptodata/1/pubpaa/US10_NEW_PUB.pep1:*
10: /SIDS5/ptodata/1/pubpaa/US11_NEW_PUB.pep1:*
11: /SIDS5/ptodata/1/pubpaa/US11_NEW_PUB.pep1:*
12: /SIDS5/ptodata/1/pubpaa/US60_NEW_PUB.pep1:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	48	100.0	15	9	US-10-530-061-1712
2	48	100.0	35	11	US-11-041-893-101
3	48	100.0	98	8	US-10-511-814-8
4	48	100.0	98	8	US-10-511-814-11
5	48	100.0	98	9	US-10-530-253-14
6	48	100.0	98	11	US-11-179-478-4
7	48	100.0	248	9	US-10-530-253-1
8	48	100.0	248	9	US-10-530-253-3
9	48	100.0	248	9	US-10-530-253-5
10	48	100.0	248	9	US-10-530-253-7
11	48	100.0	248	9	US-10-530-253-9
12	48	100.0	248	9	US-10-530-253-11
13	48	100.0	256	11	US-11-192-923A-2
14	47	97.9	99	9	US-10-530-253-30
15	40	83.3	98	9	US-10-530-253-28
16	37	77.1	799	11	US-11-096-568A-26771
17	37	77.1	842	11	US-11-096-568A-26770
18	37	77.1	849	11	US-11-096-568A-26769
19	35	72.9	910	9	US-10-745-586-153
20	34	70.8	609	11	US-11-078-951-2
21	33	68.8	112	9	US-10-502-145-15

22	33	68.8	112	9	US-10-507-662-39	Sequence 39, Appl
23	33	68.8	113	9	US-10-487-324A-7	Sequence 7, Appl1
24	33	68.8	113	9	US-10-487-324A-9	Sequence 9, Appl1
25	33	68.8	113	11	US-11-224-623-7	Sequence 7, Appl1
26	33	68.8	113	11	US-11-224-623-9	Sequence 9, Appl1
27	33	68.8	114	11	US-11-259-232-45	Sequence 45, Appl1
28	33	68.8	114	11	US-11-259-232-46	Sequence 46, Appl1
29	33	68.8	131	11	US-11-259-232-35	Sequence 35, Appl1
30	33	68.8	132	11	US-11-074-373-37	Sequence 37, Appl1
31	33	68.8	144	11	US-11-055-163-15	Sequence 15, Appl1
32	33	68.8	144	11	US-11-055-163-16	Sequence 16, Appl1
33	33	68.8	219	9	US-10-487-324A-11	Sequence 11, Appl1
34	33	68.8	219	11	US-11-224-623-11	Sequence 11, Appl1
35	33	68.8	218	11	US-11-259-232-72	Sequence 72, Appl1
36	33	68.8	218	11	US-11-239-510-21	Sequence 21, Appl1
37	33	68.8	240	11	US-11-239-510-11	Sequence 11, Appl1
38	33	68.8	242	11	US-11-259-232-42	Sequence 42, Appl1
39	33	68.8	242	11	US-11-259-232-51	Sequence 51, Appl1
40	33	68.8	242	11	US-11-259-232-56	Sequence 56, Appl1
41	33	68.8	242	11	US-11-259-232-62	Sequence 62, Appl1
42	33	68.8	250	11	US-11-239-510-15	Sequence 15, Appl1
43	33	68.8	253	11	US-11-239-510-17	Sequence 17, Appl1
44	33	68.8	304	11	US-11-096-568A-16988	Sequence 16988, A
45	33	68.8	304	11	US-11-096-568A-16987	Sequence 16987, A
46	33	68.8	306	8	US-10-505-928-79	Sequence 79, Appl1
47	33	68.8	323	11	US-11-096-568A-16986	Sequence 16986, A
48	33	68.8	331	11	US-11-264-096-1917	Sequence 1917, Ap
49	33	68.8	409	8	US-10-505-928-31	Sequence 31, Appl1
50	33	68.8	409	11	US-11-264-096-1503	Sequence 1503, Ap
51	33	68.8	670	11	US-11-264-096-1304	Sequence 1304, Ap
52	32	66.7	118	9	US-10-644-807-435	Sequence 435, App
53	32	66.7	337	9	US-10-647-657-7620	Sequence 7620, Ap
54	32	66.7	506	9	US-10-647-657-7620	Sequence 1096, Ap
55	32	66.7	513	11	US-11-087-099-1096	Sequence 1096, A
56	32	66.7	513	11	US-11-188-298-12045	Sequence 12045, A
57	31	64.6	97	9	US-10-437-950-4	Sequence 4, Appl1
58	31	64.6	113	11	US-11-131-428A-123	Sequence 123, Appl
59	31	64.6	148	11	US-11-072-512-2971	Sequence 2971, Ap
60	31	64.6	245	11	US-11-188-298-18204	Sequence 18204, A
61	31	64.6	292	9	US-10-915-002-195	Sequence 195, App
62	31	64.6	292	9	US-10-915-002-205	Sequence 205, App
63	31	64.6	292	9	US-10-915-002-215	Sequence 215, App
64	31	64.6	292	9	US-10-915-002-245	Sequence 246, App
65	31	64.6	642	11	US-11-087-099-6026	Sequence 6026, Ap
66	31	64.6	642	11	US-11-087-099-9818	Sequence 9818, Ap
67	31	64.6	682	11	US-11-098-686-10487	Sequence 10487, A
68	31	64.6	1051	9	US-10-330-773-313	Sequence 313, App
69	31	64.6	1275	9	US-10-821-234-1598	Sequence 1598, Ap
70	31	64.6	98	9	US-10-530-253-36	Sequence 36, Appl
71	30	62.5	99	9	US-10-530-253-34	Sequence 34, Appl
72	30	62.5	111	11	US-11-054-669-121	Sequence 121, App
73	30	62.5	112	11	US-11-012-353-57	Sequence 57, Appl
74	30	62.5	112	11	US-11-012-353-52	Sequence 2, Appl1
75	30	62.5	112	11	US-11-155-863-192	Sequence 192, App
76	30	62.5	113	11	US-11-054-669-122	Sequence 122, App
77	30	62.5	113	11	US-11-009-939-17	Sequence 17, Appl
78	30	62.5	114	11	US-11-037-199-17	Sequence 17, Appl
79	30	62.5	144	11	US-11-169-041-150	Sequence 150, App
80	30	62.5	147	11	US-11-079-463-8086	Sequence 8086, Ap
81	30	62.5	169	11	US-11-096-568A-24880	Sequence 24880, A
82	30	62.5	173	11	US-11-096-568A-24879	Sequence 11013, A
83	30	62.5	330	11	US-11-098-686-11013	Sequence 13, Appl
84	30	62.5	349	11	US-11-123-893-13	Sequence 13, Appl
85	30	62.5	358	11	US-11-096-568A-27213	Sequence 27213, A
86	30	62.5	360	11	US-11-096-568A-27212	Sequence 27212, A
87	30	62.5	386	11	US-11-096-568A-27211	Sequence 27211, A
88	30	62.5	420	11	US-11-124-368A-194	Sequence 194, App
89	30	62.5	443	11	US-11-098-686-11442	Sequence 11242, A
90	30	62.5	487	11	US-11-124-368A-198	Sequence 198, App
91	30	62.5	507	11	US-11-091-018-10	Sequence 10, Appl
92	30	62.5	561	11	US-11-124-368A-195	Sequence 195, App
93	30	62.5	570	11	US-11-124-368A-196	Sequence 196, App
94	30	62.5				

95	30	62.5	585	11	US-11-091-018-9	Sequence 9, Appl1	168	28	58.3	325	11	US-11-188-298-21443	Sequence 21443, A
96	30	62.5	601	9	US-10-944-772-3	Sequence 3, Appl1	169	28	58.3	325	11	US-11-188-298-21814	Sequence 21814, A
97	30	62.5	601	11	US-11-096-191-720	Sequence 720, App	170	28	58.3	363	9	US-10-194-487-590	Sequence 590, App
98	30	62.5	673	11	US-11-091-018-6	Sequence 6, Appl1	171	28	58.3	363	9	US-10-195-883-590	Sequence 590, App
99	30	62.5	687	11	US-11-091-018-8	Sequence 8, Appl1	172	28	58.3	363	9	US-10-195-888-590	Sequence 590, App
100	30	62.5	745	11	US-11-091-018-4	Sequence 4, Appl1	173	28	58.3	363	9	US-10-195-889-590	Sequence 590, App
101	30	62.5	747	9	US-10-492-835-8	Sequence 8, Appl1	174	28	58.3	364	11	US-11-188-298-18084	Sequence 18084, A
102	30	62.5	747	9	US-10-492-835-15	Sequence 15, Appl1	175	28	58.3	368	9	US-10-467-657-4756	Sequence 4756, Ap
103	30	62.5	747	9	US-10-492-835-27	Sequence 27, Appl1	176	28	58.3	370	11	US-11-188-298-14935	Sequence 14935, A
104	30	62.5	748	9	US-10-492-835-12	Sequence 12, Appl1	177	28	58.3	374	11	US-11-087-099-19935	Sequence 2640, Ap
105	30	62.5	748	9	US-10-492-835-28	Sequence 28, Appl1	178	28	58.3	375	11	US-11-079-463-6350	Sequence 6350, Ap
106	30	62.5	801	11	US-11-079-463-9002	Sequence 9002, Ap	179	28	58.3	379	11	US-11-115-203-3	Sequence 3, Appl1
107	30	62.5	809	11	US-11-091-018-2	Sequence 2, Appl1	180	28	58.3	389	11	US-11-096-568A-32526	Sequence 32526, A
108	30	62.5	1094	11	US-11-098-686-10160	Sequence 10160, A	181	28	58.3	394	11	US-11-188-298-17317	Sequence 17317, A
109	30	62.5	1119	9	US-10-330-773-316	Sequence 316, Appl1	182	28	58.3	422	9	US-10-525-710-26	Sequence 26, Appl1
110	30	62.5	1451	11	US-11-046-346-1	Sequence 1, Appl1	183	28	58.3	428	11	US-11-096-568A-32525	Sequence 32525, A
111	29	60.4	44	11	US-11-264-096-941	Sequence 941, Appl1	184	28	58.3	464	11	US-11-096-568A-27684	Sequence 27684, A
112	29	60.4	67	11	US-11-031-206-48	Sequence 48, Appl1	185	28	58.3	494	11	US-11-096-568A-27683	Sequence 27683, A
113	29	60.4	100	11	US-11-054-669-77	Sequence 77, Appl1	186	28	58.3	502	11	US-11-096-568A-32524	Sequence 32524, A
114	29	60.4	129	11	US-11-078-469-20	Sequence 20, Appl1	187	28	58.3	504	11	US-11-096-568A-32524	Sequence 32524, A
115	29	60.4	149	11	US-10-511-937-2430	Sequence 2430, Ap	188	28	58.3	614	11	US-11-188-298-47682	Sequence 27682, A
116	29	60.4	145	11	US-11-078-469-21	Sequence 21, Appl1	189	28	58.3	739	11	US-11-188-298-5486	Sequence 5486, Ap
117	29	60.4	172	11	US-11-078-469-22	Sequence 22, Appl1	190	28	58.3	752	11	US-11-072-512-2991	Sequence 2991, Ap
118	29	60.4	236	11	US-11-096-568A-30866	Sequence 30866, A	191	28	58.3	838	11	US-11-188-298-15165	Sequence 15165, A
119	29	60.4	254	11	US-11-241-631-18	Sequence 18, Appl1	192	28	58.3	841	11	US-11-188-298-1139	Sequence 1139, Ap
120	29	60.4	252	11	US-11-096-568A-24228	Sequence 24228, A	193	28	58.3	841	11	US-11-188-298-2541	Sequence 2541, Ap
121	29	60.4	301	11	US-11-096-568A-24227	Sequence 24227, A	194	28	58.3	842	11	US-11-188-298-2277	Sequence 2277, Ap
122	29	60.4	305	11	US-11-080-091-13	Sequence 13, Appl1	195	28	58.3	846	11	US-11-188-298-3677	Sequence 3677, Ap
123	29	60.4	305	11	US-11-087-177-11	Sequence 11, Appl1	196	28	58.3	918	11	US-11-188-298-9189	Sequence 9189, Ap
124	29	60.4	305	11	US-11-087-177-13	Sequence 13, Appl1	197	28	58.3	930	11	US-11-177-506-42	Sequence 42, Appl1
125	29	60.4	353	11	US-11-188-298-5200	Sequence 5200, Ap	198	28	58.3	936	11	US-11-072-512-2621	Sequence 2621, Ap
126	29	60.4	354	11	US-11-188-298-13606	Sequence 13606, A	199	28	58.3	1104	9	US-10-330-773-794	Sequence 794, App
127	29	60.4	381	11	US-11-079-463-5598	Sequence 5598, Ap	200	28	58.3	1250	9	US-10-330-773-792	Sequence 792, App
128	29	60.4	448	11	US-11-241-631-17	Sequence 17, Appl1	201	28	58.3	1368	9	US-10-770-303-2	Sequence 2, Appl1
129	29	60.4	489	11	US-11-079-463-6538	Sequence 6538, Ap	202	28	58.3	1368	11	US-11-185-373-2	Sequence 797, App
130	29	60.4	733	9	US-10-821-334-1147	Sequence 1147, Ap	203	28	58.3	1425	9	US-10-330-773-797	Sequence 797, App
131	29	60.4	4495	9	US-10-453-372-1002	Sequence 1002, Ap	204	28	58.3	2764	9	US-10-995-561-691	Sequence 691, App
132	29	60.4	5636	11	US-11-065-695-20	Sequence 20, Appl1	205	28	58.3	2813	9	US-10-995-561-688	Sequence 688, App
133	28	58.3	77	11	US-11-210-139-1	Sequence 1, Appl1	206	28	58.3	2919	9	US-10-821-234-1133	Sequence 1133, Ap
134	28	58.3	94	11	US-11-096-568A-8450	Sequence 8450, Ap	207	28	58.3	9	9	US-10-859-643-13	Sequence 13, Appl1
135	28	58.3	100	10	US-11-239-308-45	Sequence 45, Appl1	208	27	56.2	9	11	US-11-097-864-43	Sequence 43, Appl1
136	28	58.3	100	10	US-11-239-308-46	Sequence 46, Appl1	209	27	56.2	9	11	US-11-097-912-13	Sequence 13, Appl1
137	28	58.3	100	11	US-11-054-669-75	Sequence 75, Appl1	210	27	56.2	10	9	US-10-859-643-93	Sequence 93, Appl1
138	28	58.3	100	11	US-11-054-669-76	Sequence 76, Appl1	211	27	56.2	10	9	US-10-859-643-642	Sequence 642, Appl1
139	28	58.3	100	11	US-11-084-554-103	Sequence 103, App	212	27	56.2	10	11	US-11-097-864-93	Sequence 93, Appl1
140	28	58.3	100	11	US-11-084-554-107	Sequence 107, App	213	27	56.2	10	11	US-11-097-864-642	Sequence 642, App
141	28	58.3	100	11	US-11-128-900-113	Sequence 113, App	214	27	56.2	10	11	US-11-097-912-93	Sequence 93, Appl1
142	28	58.3	100	11	US-11-004-590-82	Sequence 82, Appl1	215	27	56.2	10	11	US-11-097-912-642	Sequence 642, App
143	28	58.3	100	11	US-11-004-590-83	Sequence 83, Appl1	216	27	56.2	69	11	US-11-098-686-11071	Sequence 11071, A
144	28	58.3	100	11	US-11-136-250-103	Sequence 103, Appl1	217	27	56.2	112	11	US-11-165-023-8	Sequence 8, Appl1
145	28	58.3	101	11	US-11-136-250-107	Sequence 107, App	218	27	56.2	114	11	US-11-037-199-15	Sequence 15, Appl1
146	28	58.3	101	11	US-11-096-568A-8449	Sequence 8449, Ap	219	27	56.2	124	11	US-11-096-568A-9764	Sequence 9764, Ap
147	28	58.3	101	11	US-11-155-843-126	Sequence 126, App	220	27	56.2	143	11	US-11-096-568A-9763	Sequence 9763, Ap
148	28	58.3	105	11	US-11-096-568A-8448	Sequence 8448, Ap	221	27	56.2	143	11	US-11-096-568A-14539	Sequence 14539, A
149	28	58.3	112	9	US-10-982-440-12	Sequence 12, Appl1	222	27	56.2	145	11	US-11-096-568A-9762	Sequence 9762, Ap
150	28	58.3	112	10	US-11-239-308-12	Sequence 12, Appl1	223	27	56.2	186	11	US-11-188-298-4956	Sequence 4956, Ap
151	28	58.3	113	10	US-11-239-308-2	Sequence 2, Appl1	224	27	56.2	199	11	US-11-274-910-33	Sequence 33, Appl1
152	28	58.3	114	11	US-11-194-989-2	Sequence 2, Appl1	225	27	56.2	202	11	US-11-096-568A-17918	Sequence 17918, A
153	28	58.3	114	11	US-11-195-207-2	Sequence 2, Appl1	226	27	56.2	208	11	US-11-045-004-2083	Sequence 2083, Ap
154	28	58.3	125	11	US-11-096-568A-33999	Sequence 33999, A	227	27	56.2	220	11	US-11-274-910-19	Sequence 19, Appl1
155	28	58.3	152	11	US-11-188-298-14624	Sequence 14624, A	228	27	56.2	232	11	US-11-096-568A-13168	Sequence 13168, A
156	28	58.3	158	11	US-11-087-099-9777	Sequence 9777, Ap	229	27	56.2	246	9	US-10-469-463-60	Sequence 60, Appl1
157	28	58.3	219	11	US-11-194-989-12	Sequence 12, Appl1	230	27	56.2	248	11	US-11-087-099-5097	Sequence 5097, Ap
158	28	58.3	219	11	US-11-195-207-12	Sequence 12, Appl1	231	27	56.2	251	11	US-11-096-568A-1254	Sequence 1254, Ap
159	28	58.3	221	11	US-11-096-568A-24403	Sequence 24403, A	232	27	56.2	253	9	US-10-506-454-15	Sequence 15, Appl1
160	28	58.3	224	11	US-11-054-515-1991	Sequence 1991, Ap	233	27	56.2	257	11	US-11-241-116-18	Sequence 18, Appl1
161	28	58.3	244	11	US-11-266-444-1991	Sequence 1991, Ap	234	27	56.2	268	11	US-11-056-408-14	Sequence 14, Appl1
162	28	58.3	255	11	US-11-096-568A-17146	Sequence 17146, A	235	27	56.2	277	9	US-10-469-463-56	Sequence 56, Appl1
163	28	58.3	259	11	US-11-056-825-7	Sequence 7, Appl1	236	27	56.2	280	9	US-10-979-093-10	Sequence 10, Appl1
164	28	58.3	261	11	US-11-056-825-2	Sequence 2, Appl1	237	27	56.2	287	11	US-11-096-568A-1253	Sequence 1253, Ap
165	28	58.3	286	11	US-11-188-298-13264	Sequence 13264, A	238	27	56.2	288	11	US-11-199-544-67	Sequence 67, Appl1
166	28	58.3	324	11	US-11-188-298-12367	Sequence 12367, A	239	27	56.2	291	11	US-11-096-568A-1252	Sequence 1252, Ap
167	28	58.3	324	11	US-11-188-298-17699	Sequence 17699, A	240	27	56.2	298	11	US-11-087-099-1396	Sequence 1396, Ap

241	27	56.2	301	11	US-11-188-298-10923	Sequence 10923, A	314	27	56.2	1054	11	US-11-096-568A-29300	Sequence 29300, A
242	27	56.2	310	9	US-10-527-500-55	Sequence 55, Appl	315	27	56.2	1168	11	US-11-188-298-21884	Sequence 21884, A
243	27	56.2	312	9	US-10-527-500-11	Sequence 11, Appl	316	27	56.2	1319	11	US-11-182-016-5	Sequence 5, Appl
244	27	56.2	325	9	US-10-194-487-390	Sequence 390, Appl	317	27	56.2	1333	9	US-10-523-912-2	Sequence 2, Appl
245	27	56.2	325	9	US-10-195-883-390	Sequence 390, App	318	27	56.2	3669	9	US-10-974-127A-59	Sequence 59, Appl
246	27	56.2	325	9	US-10-195-888-390	Sequence 390, App	319	27	56.2	4834	8	US-10-505-928-827	Sequence 827, App
247	27	56.2	325	9	US-10-195-889-390	Sequence 390, App	320	27	55.2	146	9	US-10-793-626-576	Sequence 576, App
248	27	56.2	325	11	US-11-266-626-41	Sequence 41, Appl	321	26	54.2	26.5	9	US-10-487-324A-3	Sequence 3, Appl
249	27	56.2	339	11	US-11-079-463-7424	Sequence 7424, Ap	322	26	54.2	9	11	US-11-074-373-49	Sequence 49, Appl
250	27	56.2	355	9	US-10-995-561-636	Sequence 636, Ap	323	26	54.2	19	9	US-11-224-622-3	Sequence 3, Appl
251	27	56.2	355	11	US-11-108-528-48	Sequence 48, Appl	324	26	54.2	19	9	US-10-467-657-8775	Sequence 8775, Ap
252	27	56.2	361	11	US-11-096-568A-7375	Sequence 7375, Ap	325	26	54.2	37	9	US-10-957-351-176	Sequence 176, Appl
253	27	56.2	362	9	US-10-995-561-637	Sequence 637, App	326	26	54.2	68	11	US-11-145-861-4	Sequence 4, Appl
254	27	56.2	362	11	US-11-096-568A-7374	Sequence 7374, Ap	327	26	54.2	78	11	US-11-050-857-1116	Sequence 1116, Ap
255	27	56.2	363	11	US-11-096-568A-7373	Sequence 7373, Ap	328	26	54.2	100	9	US-11-079-463-5706	Sequence 5706, Ap
256	27	56.2	390	11	US-11-188-298-14156	Sequence 14156, A	329	26	54.2	7	US-10-932-334-56	Sequence 56, Appl	
257	27	56.2	398	11	US-11-096-568A-6529	Sequence 6529, Ap	330	26	54.2	101	7	US-09-978-360A-552	Sequence 522, App
258	27	56.2	407	11	US-11-188-298-13550	Sequence 13550, A	331	26	54.2	101	11	US-11-096-568A-19849	Sequence 19849, A
259	27	56.2	407	11	US-11-045-004-347	Sequence 347, App	332	26	54.2	102	9	US-10-467-657-1986	Sequence 27278, A
260	27	56.2	409	11	US-11-096-568A-6528	Sequence 6528, Ap	333	26	54.2	108	11	US-11-229-264-4	Sequence 4, Appl
261	27	56.2	409	11	US-11-188-298-3056	Sequence 3056, Ap	334	26	54.2	108	11	US-11-229-264-2	Sequence 2, Appl
262	27	56.2	409	11	US-11-188-298-18383	Sequence 18383, A	335	26	54.2	111	11	US-11-012-351-54	Sequence 54, Appl
263	27	56.2	418	11	US-11-098-686-10684	Sequence 10684, A	336	26	54.2	112	11	US-11-012-353-55	Sequence 55, Appl
264	27	56.2	454	9	US-10-511-989-176	Sequence 176, App	337	26	54.2	112	11	US-11-012-353-56	Sequence 56, Appl
265	27	56.2	469	11	US-11-124-368A-321	Sequence 321, Appl	338	26	54.2	112	11	US-11-012-355-61	Sequence 61, Appl
266	27	56.2	476	11	US-11-274-910-23	Sequence 23, Appl	339	26	54.2	112	11	US-11-012-355-65	Sequence 65, Appl
267	27	56.2	479	9	US-10-821-234-871	Sequence 871, App	340	26	54.2	112	11	US-11-012-355-65	Sequence 15, Appl
268	27	56.2	505	11	US-11-087-099-4314	Sequence 4314, Ap	341	26	54.2	112	11	US-11-089-266-15	Sequence 8, Appl
269	27	56.2	506	11	US-11-188-298-4028	Sequence 4028, Ap	342	26	54.2	113	9	US-10-932-334-8	Sequence 8, Appl
270	27	56.2	516	9	US-10-524-647-39	Sequence 39, Appl	343	26	54.2	113	9	US-10-932-334-9	Sequence 9, Appl
271	27	56.2	516	9	US-10-524-972-39	Sequence 39, Appl	344	26	54.2	113	9	US-10-932-334-10	Sequence 10, Appl
272	27	56.2	516	9	US-10-524-971-8	Sequence 8, Appl	345	26	54.2	113	9	US-10-932-334-11	Sequence 11, Appl
273	27	56.2	534	11	US-11-188-298-15148	Sequence 15148, A	346	26	54.2	113	9	US-10-932-334-12	Sequence 12, Appl
274	27	56.2	539	9	US-10-131-826A-140	Sequence 140, App	347	26	54.2	113	9	US-10-932-334-58	Sequence 58, Appl
275	27	56.2	539	9	US-10-973-115B-140	Sequence 140, App	348	26	54.2	113	9	US-10-932-334-59	Sequence 59, Appl
276	27	56.2	539	9	US-10-137-873A-140	Sequence 140, App	349	26	54.2	113	9	US-10-932-334-60	Sequence 60, Appl
277	27	56.2	539	9	US-10-152-370-140	Sequence 140, App	350	26	54.2	113	9	US-10-932-334-61	Sequence 61, Appl
278	27	56.2	539	11	US-11-188-298-12587	Sequence 12587, A	351	26	54.2	113	9	US-10-932-334-62	Sequence 62, Appl
279	27	56.2	539	11	US-11-290-153-140	Sequence 140, App	352	26	54.2	113	9	US-10-932-334-63	Sequence 63, Appl
280	27	56.2	543	11	US-11-188-298-10198	Sequence 10198, A	353	26	54.2	113	9	US-10-932-334-64	Sequence 64, Appl
281	27	56.2	549	11	US-11-188-298-5246	Sequence 5246, Ap	354	26	54.2	113	9	US-10-932-334-66	Sequence 66, Appl
282	27	56.2	559	11	US-11-188-298-18185	Sequence 18185, A	355	26	54.2	113	9	US-10-932-334-66	Sequence 66, Appl
283	27	56.2	559	11	US-11-188-298-3011	Sequence 3011, Ap	356	26	54.2	113	9	US-10-932-334-69	Sequence 69, Appl
284	27	56.2	656	11	US-11-188-298-930	Sequence 930, App	357	26	54.2	113	9	US-10-932-334-82	Sequence 82, Appl
285	27	56.2	752	11	US-11-079-463-9598	Sequence 9598, App	358	26	54.2	113	9	US-10-932-334-83	Sequence 83, Appl
286	27	56.2	761	11	US-11-079-463-5439	Sequence 5439, Ap	359	26	54.2	113	9	US-10-932-334-85	Sequence 85, Appl
287	27	56.2	778	9	US-10-467-962B-18	Sequence 18, Appl	360	26	54.2	113	9	US-10-932-334-86	Sequence 86, Appl
288	27	56.2	809	11	US-11-188-298-16039	Sequence 16039, A	361	26	54.2	113	9	US-10-932-334-94	Sequence 94, Appl
289	27	56.2	838	11	US-11-096-568A-29302	Sequence 29302, A	362	26	54.2	113	9	US-10-932-334-94	Sequence 94, Appl
290	27	56.2	840	11	US-11-188-298-13743	Sequence 13743, A	363	26	54.2	113	9	US-10-932-334-94	Sequence 94, Appl
291	27	56.2	841	11	US-11-188-298-7321	Sequence 7321, Ap	364	26	54.2	113	9	US-11-037-199-14	Sequence 14, Appl
292	27	56.2	841	11	US-11-188-298-10399	Sequence 10399, A	365	26	54.2	114	11	US-11-037-199-26	Sequence 26, Appl
293	27	56.2	841	11	US-11-188-298-10547	Sequence 10547, A	366	26	54.2	114	11	US-11-037-199-34	Sequence 34, Appl
294	27	56.2	866	11	US-11-096-568A-29301	Sequence 29301, A	367	26	54.2	115	11	US-11-172-740-990	Sequence 990, App
295	27	56.2	871	9	US-10-859-643-765	Sequence 765, App	368	26	54.2	115	11	US-11-065-943-49	Sequence 49, App
296	27	56.2	871	11	US-11-097-864-765	Sequence 765, App	369	26	54.2	116	11	US-11-096-568A-14526	Sequence 14526, A
297	27	56.2	871	11	US-11-097-912-765	Sequence 765, App	370	26	54.2	117	11	US-11-012-353-49	Sequence 49, Appl
298	27	56.2	875	9	US-10-859-643-743	Sequence 743, App	371	26	54.2	122	11	US-11-012-353-49	Sequence 19848, A
299	27	56.2	875	9	US-10-859-643-745	Sequence 745, App	372	26	54.2	122	11	US-11-096-568A-18848	Sequence 26728, A
300	27	56.2	875	9	US-10-859-643-747	Sequence 747, App	373	26	54.2	122	11	US-11-096-568A-26728	Sequence 27277, A
301	27	56.2	875	9	US-10-859-643-748	Sequence 748, App	374	26	54.2	122	11	US-11-096-568A-27277	Sequence 27277, A
302	27	56.2	875	9	US-10-859-643-751	Sequence 751, App	375	26	54.2	124	11	US-11-087-099-7951	Sequence 7951, Ap
303	27	56.2	875	11	US-11-097-864-743	Sequence 743, App	376	26	54.2	124	11	US-11-188-298-7335	Sequence 7335, Ap
304	27	56.2	875	11	US-11-097-864-745	Sequence 745, App	377	26	54.2	126	11	US-11-004-399-2428	Sequence 2428, Ap
305	27	56.2	875	11	US-11-097-864-747	Sequence 747, App	378	26	54.2	131	11	US-10-789-473-14	Sequence 14, Appl
306	27	56.2	875	11	US-11-097-864-748	Sequence 748, App	379	26	54.2	131	11	US-11-012-353-63	Sequence 63, Appl
307	27	56.2	875	11	US-11-097-864-751	Sequence 751, App	380	26	54.2	131	11	US-11-012-353-67	Sequence 67, Appl
308	27	56.2	875	11	US-11-097-912-743	Sequence 743, App	381	26	54.2	131	11	US-11-125-837-23	Sequence 23, Appl
309	27	56.2	875	11	US-11-097-912-745	Sequence 745, App	382	26	54.2	132	9	US-10-932-334-50	Sequence 50, Appl
310	27	56.2	875	11	US-11-097-912-747	Sequence 747, App	383	26	54.2	132	9	US-10-489-666-30	Sequence 30, Appl
311	27	56.2	875	11	US-11-097-912-748	Sequence 748, App	384	26	54.2	148	9	US-10-213-992-42	Sequence 42, Appl
312	27	56.2	875	11	US-11-097-912-751	Sequence 751, App	385	26	54.2	149	11	US-11-052-554A-82	Sequence 82, Appl
313	27	56.2	916	11	US-11-072-512-2297	Sequence 2297, Ap	386	26	54.2	149	11	US-11-089-266-2	Sequence 2, Appl

387	26	54.2	156	11	US-11-188-298-18341	Sequence 18341, A	460	26	54.2	443	11	US-11-079-463-8714	Sequence 8714, Ap
388	26	54.2	152	9	US-10-467-657-7062	Sequence 7062, Ap	461	26	54.2	454	11	US-11-096-568A-7150	Sequence 7150, Ap
389	26	54.2	163	11	US-11-172-740-2015	Sequence 2015, Ap	462	26	54.2	462	11	US-11-079-463-6461	Sequence 6461, Ap
390	26	54.2	171	11	US-11-096-568A-8748	Sequence 8748, Ap	463	26	54.2	463	11	US-11-188-288-16262	Sequence 16262, A
391	26	54.2	172	11	US-11-096-568A-24930	Sequence 24930, A	464	26	54.2	475	11	US-11-096-568A-4755	Sequence 4755, Ap
392	26	54.2	174	11	US-11-096-568A-26725	Sequence 26725, A	465	26	54.2	483	9	US-10-632-150-48	Sequence 48, Appl
393	26	54.2	178	11	US-11-087-099-7382	Sequence 7382, Ap	466	26	54.2	483	10	US-11-106-014-48	Sequence 48, Appl
394	26	54.2	188	11	US-11-096-568A-24929	Sequence 24929, A	467	26	54.2	483	11	US-11-073-467-48	Sequence 48, Appl
395	26	54.2	192	11	US-11-096-568A-22560	Sequence 22560, A	468	26	54.2	483	11	US-11-073-460-48	Sequence 48, Appl
396	26	54.2	199	11	US-11-188-298-10553	Sequence 10553, A	469	26	54.2	486	11	US-11-188-288-9513	Sequence 9513, Ap
397	26	54.2	200	11	US-11-096-568A-21426	Sequence 21426, A	470	26	54.2	490	9	US-10-131-826A-310	Sequence 310, App
398	26	54.2	200	11	US-11-096-568A-23559	Sequence 22559, A	471	26	54.2	490	9	US-10-973-115B-310	Sequence 310, App
399	26	54.2	211	11	US-11-096-568A-14591	Sequence 14591, A	472	26	54.2	490	9	US-10-137-873A-110	Sequence 310, App
400	26	54.2	211	11	US-11-096-568A-14857	Sequence 14857, A	473	26	54.2	490	9	US-10-152-370-310	Sequence 310, App
401	26	54.2	216	11	US-11-226-657-69	Sequence 69, Appl	474	26	54.2	490	11	US-11-290-153-310	Sequence 310, App
402	26	54.2	217	11	US-11-096-568A-24928	Sequence 24928, A	475	26	54.2	494	11	US-11-096-568A-7149	Sequence 7149, Ap
403	26	54.2	219	11	US-11-080-587-8	Sequence 8, Appl	476	26	54.2	494	11	US-11-188-298-3094	Sequence 3094, Ap
404	26	54.2	225	11	US-11-096-568A-21425	Sequence 21425, A	477	26	54.2	495	11	US-11-187-016-31	Sequence 31, Appl
405	26	54.2	224	8	US-10-505-928-507	Sequence 507, App	478	26	54.2	495	11	US-11-124-367A-349	Sequence 349, App
406	26	54.2	235	9	US-10-878-556A-182	Sequence 182, App	479	26	54.2	500	11	US-11-188-288-5262	Sequence 5262, Ap
407	26	54.2	245	11	US-11-172-740-2019	Sequence 2019, Ap	480	26	54.2	502	11	US-11-072-512-3860	Sequence 3860, Ap
408	26	54.2	246	9	US-10-467-657-2424	Sequence 2424, Ap	481	26	54.2	507	11	US-11-124-367A-351	Sequence 351, App
409	26	54.2	250	11	US-11-087-099-3334	Sequence 3334, Ap	482	26	54.2	511	9	US-10-131-826A-122	Sequence 122, App
410	26	54.2	251	9	US-10-512-184-30	Sequence 30, Appl	483	26	54.2	511	9	US-10-973-115B-122	Sequence 122, App
411	26	54.2	254	11	US-11-087-099-4689	Sequence 4689, Ap	484	26	54.2	511	9	US-10-137-873A-122	Sequence 122, App
412	26	54.2	257	11	US-11-096-568A-4757	Sequence 4757, Ap	485	26	54.2	511	9	US-10-152-370-122	Sequence 122, App
413	26	54.2	257	11	US-11-096-568A-6223	Sequence 6223, Ap	486	26	54.2	511	11	US-11-079-463-6730	Sequence 8730, Ap
414	26	54.2	259	9	US-10-714-887-40	Sequence 40, Appl	487	26	54.2	511	11	US-11-290-153-122	Sequence 122, App
415	26	54.2	259	11	US-11-285-818-14	Sequence 14, Appl	488	26	54.2	512	11	US-11-096-568A-7148	Sequence 7148, Ap
416	26	54.2	262	11	US-11-096-568A-14590	Sequence 14590, A	489	26	54.2	515	11	US-11-172-740-1442	Sequence 1442, Ap
417	26	54.2	262	11	US-11-096-568A-14856	Sequence 14856, A	490	26	54.2	520	9	US-10-506-456-1581	Sequence 1581, Ap
418	26	54.2	263	11	US-11-089-266-66	Sequence 66, Appl	491	26	54.2	520	11	US-11-188-288-3430	Sequence 3430, Ap
419	26	54.2	264	11	US-11-096-568A-4756	Sequence 4756, Ap	492	26	54.2	539	9	US-10-915-002-206	Sequence 206, App
420	26	54.2	264	11	US-11-096-568A-15170	Sequence 15170, A	493	26	54.2	542	11	US-11-079-463-9321	Sequence 9321, Ap
421	26	54.2	281	11	US-11-096-568A-55	Sequence 55, Appl	494	26	54.2	554	11	US-11-096-666-10420	Sequence 10420, A
422	26	54.2	284	11	US-11-096-568A-33476	Sequence 33476, A	495	26	54.2	564	8	US-10-505-928-369	Sequence 369, Appl
423	26	54.2	287	11	US-11-072-512-2891	Sequence 2891, Ap	496	26	54.2	564	8	US-10-511-455-60	Sequence 60, Appl
424	26	54.2	311	11	US-11-096-568A-15169	Sequence 15169, A	497	26	54.2	564	8	US-10-511-937-2943	Sequence 2943, Ap
425	26	54.2	319	8	US-10-511-937-2981	Sequence 2981, Ap	498	26	54.2	565	11	US-11-188-288-13487	Sequence 13487, A
426	26	54.2	319	9	US-10-512-184-67	Sequence 67, Appl	499	26	54.2	567	9	US-10-330-773-556	Sequence 556, App
427	26	54.2	320	11	US-11-096-568A-6222	Sequence 6222, Ap	500	26	54.2	569	9	US-10-512-184-66	Sequence 66, Appl
428	26	54.2	322	11	US-11-096-568A-5422	Sequence 54, Appl	501	26	54.2	571	11	US-11-072-512-2414	Sequence 2414, Ap
429	26	54.2	324	11	US-11-096-568A-14996	Sequence 14996, A	502	26	54.2	583	11	US-11-087-059-3977	Sequence 3977, Ap
430	26	54.2	324	11	US-11-096-568A-6221	Sequence 6221, Ap	503	26	54.2	583	11	US-11-087-059-3977	Sequence 468, App
431	26	54.2	331	11	US-11-096-568A-5810	Sequence 5810, A	504	26	54.2	584	9	US-10-330-773-468	Sequence 470, App
432	26	54.2	337	11	US-11-079-463-5810	Sequence 5810, A	505	26	54.2	586	9	US-10-131-826A-46	Sequence 46, Appl
433	26	54.2	345	11	US-11-096-568A-33475	Sequence 33475, A	506	26	54.2	586	9	US-10-973-115B-46	Sequence 46, Appl
434	26	54.2	349	9	US-10-821-234-1387	Sequence 1387, Ap	507	26	54.2	586	9	US-10-137-873A-46	Sequence 46, Appl
435	26	54.2	356	11	US-11-188-298-12387	Sequence 12387, A	508	26	54.2	586	9	US-10-152-370-46	Sequence 46, Appl
436	26	54.2	357	11	US-11-123-893-12	Sequence 12, Appl	509	26	54.2	586	9	US-10-152-370-46	Sequence 46, Appl
437	26	54.2	360	9	US-10-873-528-84	Sequence 84, Appl	510	26	54.2	586	11	US-11-290-153-46	Sequence 46, Appl
438	26	54.2	364	11	US-11-096-568A-33474	Sequence 33474, A	511	26	54.2	590	11	US-11-040-218-11	Sequence 11, Appl
439	26	54.2	369	9	US-10-515-547-2	Sequence 2, Appl	512	26	54.2	593	9	US-10-055-877-1312	Sequence 132, App
440	26	54.2	371	11	US-11-096-568A-8795	Sequence 8795, Ap	513	26	54.2	609	9	US-10-821-234-1611	Sequence 1611, Ap
441	26	54.2	382	11	US-11-096-568A-14995	Sequence 14995, A	514	26	54.2	609	11	US-11-154-293-2	Sequence 2, Appl
442	26	54.2	385	9	US-10-453-195-14	Sequence 14, Appl	515	26	54.2	618	9	US-10-512-184-48	Sequence 48, Appl
443	26	54.2	390	11	US-11-050-857-59	Sequence 59, Appl	516	26	54.2	618	9	US-10-506-454-237	Sequence 237, App
444	26	54.2	391	11	US-11-096-568A-8794	Sequence 8794, Ap	517	26	54.2	637	9	US-10-055-877-1311	Sequence 131, App
445	26	54.2	398	11	US-11-123-893-11	Sequence 11, Appl	518	26	54.2	681	11	US-11-079-463-8312	Sequence 8312, Ap
446	26	54.2	401	11	US-11-096-568A-33377	Sequence 33377, A	519	26	54.2	693	11	US-11-096-568A-28539	Sequence 28539, A
447	26	54.2	401	11	US-11-096-568A-14994	Sequence 14994, A	520	26	54.2	693	11	US-11-096-568A-28533	Sequence 28533, A
448	26	54.2	405	11	US-11-079-463-5262	Sequence 5262, Ap	521	26	54.2	694	11	US-11-188-288-628	Sequence 628, App
449	26	54.2	409	11	US-11-096-568A-8793	Sequence 8793, Ap	522	26	54.2	695	11	US-11-079-463-5291	Sequence 5291, Ap
450	26	54.2	409	11	US-11-188-298-15630	Sequence 15630, Ap	523	26	54.2	696	11	US-11-096-568A-26498	Sequence 26498, A
451	26	54.2	412	11	US-11-096-568A-33376	Sequence 33376, A	524	26	54.2	705	11	US-11-096-568A-28532	Sequence 28532, A
452	26	54.2	418	11	US-11-188-298-11337	Sequence 11337, A	525	26	54.2	718	11	US-11-096-568A-26497	Sequence 26497, A
453	26	54.2	427	11	US-11-087-099-11888	Sequence 11888, A	526	26	54.2	721	8	US-10-511-455-58	Sequence 58, Appl
454	26	54.2	432	11	US-11-096-568A-8792	Sequence 8792, Ap	527	26	54.2	736	8	US-10-511-455-58	Sequence 56, Appl
455	26	54.2	434	11	US-11-098-686-10155	Sequence 10155, A	528	26	54.2	736	11	US-11-169-041-207	Sequence 207, App
456	26	54.2	437	11	US-11-087-099-5390	Sequence 5390, Ap	529	26	54.2	798	11	US-11-045-004-1705	Sequence 1705, Ap
457	26	54.2	439	11	US-11-034-569-16	Sequence 16, Appl	530	26	54.2	820	11	US-11-188-298-20744	Sequence 20744, A
458	26	54.2	439	11	US-11-045-004-1683	Sequence 1683, Ap	531	26	54.2	992	11	US-11-010-239-115	Sequence 115, App
459	26	54.2	442	11	US-11-188-298-20694	Sequence 20694, A	532	26	54.2	1083	11	US-11-079-463-6200	Sequence 6200, Ap

533	26	54.2	1102	11	US-11-096-568A-30725	Sequence 30725, A	606	25	52.1	128	11	US-11-170-453-8	Sequence 8, Appl1
534	26	54.2	1125	11	US-11-087-099-2336	Sequence 2396, Ap	607	25	52.1	131	11	US-11-155-843-145	Sequence 145, App
535	26	54.2	1156	11	US-11-096-568A-30724	Sequence 30724, A	608	25	52.1	132	11	US-11-155-843-149	Sequence 149, App
536	26	54.2	1193	11	US-11-139-435-3	Sequence 3, Appl1	609	25	52.1	132	11	US-11-155-843-190	Sequence 190, App
537	26	54.2	1207	11	US-11-079-463-5235	Sequence 5235, Ap	610	25	52.1	134	11	US-11-098-688-10688	Sequence 10688, A
538	26	54.2	1208	9	US-10-330-773-244	Sequence 244, App	611	25	52.1	135	11	US-11-155-843-153	Sequence 153, App
539	26	54.2	1240	11	US-11-096-568A-30723	Sequence 30723, A	612	25	52.1	151	11	US-11-096-568A-21027	Sequence 21027, A
540	26	54.2	1263	11	US-11-076-163-3	Sequence 3, Appl1	613	25	52.1	157	11	US-11-072-512-3538	Sequence 3538, A
541	26	54.2	1308	9	US-10-912-971-12	Sequence 12, Appl1	614	25	52.1	161	11	US-11-072-512-2659	Sequence 2699, Ap
542	26	54.2	1308	11	US-11-113-202-16	Sequence 16, Appl1	615	25	52.1	172	9	US-10-517-696-108	Sequence 108, App
543	26	54.2	1351	11	US-11-129-741-2937	Sequence 2937, Ap	616	25	52.1	173	11	US-11-045-004-557	Sequence 557, App
544	26	54.2	1351	11	US-11-129-741-2947	Sequence 2947, Ap	617	25	52.1	177	9	US-10-873-528-108	Sequence 108, App
545	26	54.2	1356	11	US-11-129-741-2939	Sequence 2939, Ap	618	25	52.1	183	9	US-10-467-657-9192	Sequence 9192, Ap
546	26	54.2	1356	11	US-11-129-741-2941	Sequence 2941, Ap	619	25	52.1	187	11	US-11-087-099-1401	Sequence 1401, Ap
547	26	54.2	1356	11	US-11-129-741-2943	Sequence 2943, Ap	620	25	52.1	184	11	US-11-199-719-1	Sequence 1, Appl1
548	26	54.2	1356	11	US-11-129-741-2945	Sequence 2945, Ap	621	25	52.1	194	11	US-11-199-719-10	Sequence 10, Appl1
549	26	54.2	1356	11	US-11-129-741-2949	Sequence 2949, Ap	622	25	52.1	196	9	US-10-455-772-180	Sequence 180, App
550	26	54.2	1356	11	US-11-129-741-2951	Sequence 2951, Ap	623	25	52.1	196	9	US-10-455-772-186	Sequence 186, App
551	26	54.2	1356	11	US-11-129-741-4245	Sequence 4245, Ap	624	25	52.1	196	9	US-10-455-772-188	Sequence 188, App
552	26	54.2	1362	9	US-10-895-064-420	Sequence 420, App	625	25	52.1	196	9	US-10-455-772-190	Sequence 190, App
553	26	54.2	1362	11	US-11-129-741-420	Sequence 420, App	626	25	52.1	196	9	US-10-455-772-192	Sequence 192, App
554	26	54.2	1385	11	US-11-129-741-3655	Sequence 3655, Ap	627	25	52.1	196	9	US-10-455-772-194	Sequence 194, App
555	26	54.2	1433	11	US-11-094-519A-40	Sequence 40, Appl1	628	25	52.1	198	11	US-11-096-568A-30114	Sequence 30114, A
556	26	54.2	1554	11	US-11-186-284-93	Sequence 93, Appl1	629	25	52.1	203	11	US-11-072-513-3713	Sequence 3713, Ap
557	26	54.2	1644	9	US-10-204-639-52	Sequence 52, Appl1	630	25	52.1	203	11	US-10-194-487-40	Sequence 40, Appl1
558	26	54.2	1724	9	US-10-510-506-2	Sequence 2, Appl1	631	25	52.1	204	9	US-10-195-883-40	Sequence 40, Appl1
559	26	54.2	2204	9	US-10-495-083-8	Sequence 8, Appl1	632	25	52.1	204	9	US-10-195-888-40	Sequence 40, Appl1
560	26	54.2	3375	11	US-11-044-111-23	Sequence 23, Appl1	633	25	52.1	204	9	US-10-195-889-40	Sequence 40, Appl1
561	26	54.2	5738	8	US-10-505-978-150	Sequence 150, App	634	25	52.1	204	9	US-10-216-161A-36	Sequence 36, Appl1
562	26	53.1	1023	11	US-11-188-298-7150	Sequence 7150, Ap	635	25	52.1	204	11	US-11-080-991-8	Sequence 8, Appl1
563	25.5	53.1	1296	11	US-11-188-298-5560	Sequence 5560, Ap	636	25	52.1	204	11	US-11-144-947-429	Sequence 429, App
564	25.5	53.1	1296	11	US-11-188-298-9652	Sequence 9652, Ap	637	25	52.1	204	11	US-11-144-947-429	Sequence 429, App
565	25.5	53.1	1398	11	US-11-188-298-14982	Sequence 14982, A	638	25	52.1	206	9	US-10-455-772-182	Sequence 182, App
566	25	52.1	28	11	US-11-009-873A-142	Sequence 142, App	639	25	52.1	206	9	US-10-455-772-184	Sequence 184, App
567	25	52.1	28	11	US-11-009-873A-142	Sequence 142, App	640	25	52.1	206	9	US-10-455-772-398	Sequence 398, App
568	25	52.1	28	11	US-11-009-769A-142	Sequence 142, App	641	25	52.1	213	11	US-11-096-568A-11517	Sequence 1517, A
569	25	52.1	44	9	US-10-467-657-9956	Sequence 2956, Ap	642	25	52.1	221	11	US-11-188-298-9861	Sequence 9861, Ap
570	25	52.1	52	9	US-10-895-064-2769	Sequence 2769, Ap	643	25	52.1	214	11	US-11-188-298-10216	Sequence 10216, A
571	25	52.1	52	11	US-11-129-741-2769	Sequence 8062, Ap	644	25	52.1	214	11	US-11-188-298-10216	Sequence 10216, A
572	25	52.1	59	9	US-10-467-657-8062	Sequence 15786, Ap	645	25	52.1	214	11	US-11-188-298-10216	Sequence 10216, A
573	25	52.1	61	11	US-11-188-298-15786	Sequence 15786, Ap	646	25	52.1	221	11	US-11-096-568A-9530	Sequence 9530, Ap
574	25	52.1	69	11	US-11-079-463-9588	Sequence 9587, Ap	647	25	52.1	221	11	US-11-096-568A-9530	Sequence 9530, Ap
575	25	52.1	75	11	US-11-188-298-5837	Sequence 5837, Ap	648	25	52.1	222	9	US-10-821-234-1417	Sequence 1417, Ap
576	25	52.1	77	11	US-11-188-298-18551	Sequence 18551, A	649	25	52.1	222	11	US-11-087-099-472	Sequence 472, App
577	25	52.1	80	11	US-11-096-568A-13194	Sequence 13194, A	650	25	52.1	226	11	US-11-096-568A-11392	Sequence 11392, A
578	25	52.1	83	11	US-11-188-298-5863	Sequence 5863, Ap	651	25	52.1	229	11	US-11-096-568A-23258	Sequence 23258, A
579	25	52.1	84	9	US-10-821-234-1405	Sequence 1405, Ap	652	25	52.1	234	11	US-11-079-463-9168	Sequence 9168, Ap
580	25	52.1	85	11	US-11-096-568A-14255	Sequence 14255, A	653	25	52.1	237	9	US-10-194-487-222	Sequence 222, App
581	25	52.1	88	11	US-11-096-568A-21029	Sequence 21029, A	654	25	52.1	237	9	US-10-195-883-222	Sequence 222, App
582	25	52.1	88	11	US-11-264-096-1123	Sequence 1123, Ap	655	25	52.1	237	9	US-10-195-888-222	Sequence 222, App
583	25	52.1	91	11	US-11-096-568A-15751	Sequence 15751, A	656	25	52.1	237	9	US-10-195-889-222	Sequence 222, App
584	25	52.1	92	11	US-11-264-096-1889	Sequence 1889, Ap	657	25	52.1	237	11	US-11-045-004-848	Sequence 848, App
585	25	52.1	92	11	US-11-264-096-1890	Sequence 1890, Ap	658	25	52.1	238	11	US-11-096-568A-5478	Sequence 5478, Ap
586	25	52.1	94	9	US-10-995-561-603	Sequence 603, App	659	25	52.1	242	11	US-11-096-568A-11391	Sequence 11391, A
587	25	52.1	94	9	US-10-995-561-604	Sequence 604, App	660	25	52.1	242	11	US-11-188-298-19317	Sequence 19317, A
588	25	52.1	95	11	US-11-096-568A-13193	Sequence 13193, A	661	25	52.1	242	11	US-11-096-568A-23257	Sequence 23257, A
589	25	52.1	95	11	US-11-045-004-841	Sequence 841, App	662	25	52.1	247	11	US-11-096-568A-23256	Sequence 23256, A
590	25	52.1	102	11	US-11-155-843-30	Sequence 30, Appl1	663	25	52.1	258	11	US-11-096-568A-19920	Sequence 19920, A
591	25	52.1	102	11	US-11-155-843-31	Sequence 31, Appl1	664	25	52.1	261	8	US-10-474-653-1	Sequence 1, Appl1
592	25	52.1	102	11	US-11-155-843-32	Sequence 32, Appl1	665	25	52.1	271	11	US-11-096-568A-11390	Sequence 11390, A
593	25	52.1	102	11	US-11-155-843-33	Sequence 33, Appl1	666	25	52.1	275	9	US-10-467-657-402	Sequence 402, App
594	25	52.1	102	11	US-11-155-843-34	Sequence 34, Appl1	667	25	52.1	275	9	US-10-467-657-402	Sequence 402, App
595	25	52.1	102	11	US-11-155-843-35	Sequence 35, Appl1	668	25	52.1	278	11	US-11-096-568A-23004	Sequence 23004, A
596	25	52.1	102	11	US-11-155-843-36	Sequence 36, Appl1	669	25	52.1	279	9	US-10-467-657-1310	Sequence 1310, Ap
597	25	52.1	102	11	US-11-155-843-37	Sequence 37, Appl1	670	25	52.1	279	11	US-11-102-197-8	Sequence 8, Appl1
598	25	52.1	102	11	US-11-155-843-38	Sequence 38, Appl1	671	25	52.1	280	9	US-10-467-657-1326	Sequence 1326, Ap
599	25	52.1	102	11	US-11-155-843-39	Sequence 39, Appl1	672	25	52.1	280	11	US-11-102-497-6	Sequence 6, Appl1
600	25	52.1	112	11	US-11-096-568A-13192	Sequence 13192, A	673	25	52.1	281	8	US-10-505-928-367	Sequence 367, App
601	25	52.1	113	9	US-11-155-843-133	Sequence 133, App	674	25	52.1	281	9	US-10-821-234-1288	Sequence 1288, Ap
602	25	52.1	114	11	US-11-072-512-3445	Sequence 3445, Ap	675	25	52.1	281	9	US-10-501-035-469	Sequence 469, App
603	25	52.1	124	11	US-11-096-568A-14254	Sequence 14254, A	676	25	52.1	281	10	US-11-254-182-46	Sequence 46, Appl1
604	25	52.1	127	11	US-11-221-902-16	Sequence 16, Appl1	677	25	52.1	281	11	US-11-077-272-2	Sequence 2, Appl1
605	25	52.1	127	11	US-11-096-568A-14253	Sequence 14253, A	678	25	52.1	281	11	US-11-136-842-1	Sequence 1, Appl1

679	25	52.1	281	11	US-11-136-079-5	Sequence 5, Appl1	752	25	52.1	411	11	US-11-061-869-16	Sequence 16, Appl1
680	25	52.1	281	11	US-11-221-281-5	Sequence 5, Appl1	753	25	52.1	411	11	US-11-096-568A-23209	Sequence 23209, A
681	25	52.1	281	11	US-11-188-298-7735	Sequence 7735, Ap	754	25	52.1	411	11	US-11-106-067-28	Sequence 28, Appl1
682	25	52.1	282	11	US-11-096-568A-5477	Sequence 5477, Ap	755	25	52.1	411	9	US-10-523-503-4	Sequence 4, Appl1
683	25	52.1	286	11	US-11-096-568A-9529	Sequence 9529, Ap	756	25	52.1	415	11	US-11-072-512-2954	Sequence 2954, Ap
684	25	52.1	288	9	US-10-467-657-4590	Sequence 4590, Ap	757	25	52.1	416	11	US-11-087-099-1321	Sequence 1321, Ap
685	25	52.1	288	11	US-11-096-568A-18671	Sequence 18671, A	758	25	52.1	419	11	US-11-096-568A-12403	Sequence 12403, A
686	25	52.1	288	11	US-11-087-099-9971	Sequence 9971, Ap	759	25	52.1	419	11	US-11-096-568A-26554	Sequence 26554, A
687	25	52.1	290	11	US-11-087-099-9971	Sequence 9528, Ap	760	25	52.1	420	11	US-11-087-099-1720	Sequence 17200, Ap
688	25	52.1	291	11	US-11-096-568A-9528	Sequence 9528, Ap	761	25	52.1	423	11	US-11-096-568A-25217	Sequence 25217, A
689	25	52.1	293	9	US-10-505-230-2	Sequence 7443, Ap	762	25	52.1	426	11	US-11-188-298-15980	Sequence 15980, A
690	25	52.1	295	11	US-11-096-568A-7443	Sequence 7443, Ap	763	25	52.1	433	9	US-10-821-233-1353	Sequence 1353, Ap
691	25	52.1	299	11	US-11-188-298-17218	Sequence 17218, A	764	25	52.1	435	11	US-11-096-568A-29831	Sequence 29831, A
692	25	52.1	301	11	US-11-096-568A-5476	Sequence 54760, Ap	765	25	52.1	443	11	US-11-096-568A-26553	Sequence 26553, A
693	25	52.1	301	11	US-11-096-568A-18670	Sequence 5794, Ap	766	25	52.1	444	11	US-11-188-298-4499	Sequence 4499, Ap
694	25	52.1	304	9	US-10-467-657-5794	Sequence 10872, A	767	25	52.1	445	11	US-11-188-298-1720	Sequence 28951, A
695	25	52.1	308	11	US-11-098-686-10872	Sequence 4935, Ap	768	25	52.1	447	11	US-11-096-568A-28951	Sequence 33770, A
696	25	52.1	308	11	US-11-087-099-4935	Sequence 4531, Ap	769	25	52.1	449	9	US-10-506-454-295	Sequence 295, App
697	25	52.1	312	11	US-11-188-298-4531	Sequence 14, Appl1	770	25	52.1	449	11	US-10-506-454-295	Sequence 295, App
698	25	52.1	312	11	US-11-197-721-14	Sequence 20328, A	771	25	52.1	456	11	US-11-106-067-30	Sequence 30, Appl1
699	25	52.1	320	11	US-11-096-568A-20328	Sequence 20328, A	772	25	52.1	456	11	US-11-096-568A-20205	Sequence 4, Appl1
700	25	52.1	321	9	US-10-959-310-4	Sequence 4, Appl1	773	25	52.1	457	11	US-11-096-568A-20205	Sequence 20205, A
701	25	52.1	321	11	US-10-959-322-10	Sequence 10, Appl1	774	25	52.1	460	11	US-11-024-959-348	Sequence 348, App
702	25	52.1	321	11	US-11-131-212-72	Sequence 72, Appl1	775	25	52.1	460	11	US-11-096-568A-26472	Sequence 26472, A
703	25	52.1	321	11	US-11-096-568A-23211	Sequence 23211, A	776	25	52.1	465	11	US-11-024-959-480	Sequence 480, App
704	25	52.1	321	11	US-11-218-473-72	Sequence 72, Appl1	777	25	52.1	465	11	US-11-188-298-16509	Sequence 16509, A
705	25	52.1	321	11	US-11-240-579-72	Sequence 72, Appl1	778	25	52.1	467	11	US-11-188-298-2404	Sequence 2404, Ap
706	25	52.1	321	11	US-11-287-324-72	Sequence 72, Appl1	779	25	52.1	471	11	US-11-096-568A-5680	Sequence 5680, Ap
707	25	52.1	331	11	US-11-287-359-72	Sequence 72, Appl1	780	25	52.1	476	11	US-11-079-463-9043	Sequence 9043, Ap
708	25	52.1	332	11	US-11-098-686-10665	Sequence 10665, A	781	25	52.1	478	11	US-11-096-568A-20204	Sequence 20204, A
709	25	52.1	337	11	US-11-096-568A-4018	Sequence 4018, Ap	782	25	52.1	479	9	US-10-055-877-134	Sequence 134, App
710	25	52.1	338	11	US-11-096-568A-22210	Sequence 23210, A	783	25	52.1	480	11	US-11-096-568A-5679	Sequence 5679, Ap
711	25	52.1	331	11	US-11-096-568A-25219	Sequence 25219, A	784	25	52.1	485	9	US-10-055-877-133	Sequence 133, App
712	25	52.1	333	11	US-11-096-568A-25218	Sequence 25218, A	785	25	52.1	485	11	US-11-096-568A-26552	Sequence 26552, A
713	25	52.1	336	11	US-11-197-721-10	Sequence 10, Appl1	786	25	52.1	497	11	US-11-188-298-18081	Sequence 18081, A
714	25	52.1	336	11	US-11-096-568A-18669	Sequence 18669, A	787	25	52.1	500	11	US-11-096-568A-29830	Sequence 29830, A
715	25	52.1	337	11	US-11-096-568A-20327	Sequence 20327, A	788	25	52.1	500	11	US-11-096-568A-33769	Sequence 33769, A
716	25	52.1	339	9	US-10-203-486-6	Sequence 6, Appl1	789	25	52.1	502	11	US-11-096-568A-26471	Sequence 26471, A
717	25	52.1	343	11	US-11-096-568A-23003	Sequence 23003, A	790	25	52.1	505	11	US-11-188-298-2266	Sequence 2166, Ap
718	25	52.1	345	11	US-11-079-463-6230	Sequence 6230, Ap	791	25	52.1	507	11	US-11-096-568A-20203	Sequence 20203, A
719	25	52.1	347	9	US-10-821-234-1081	Sequence 1081, Ap	792	25	52.1	510	11	US-11-096-568A-28950	Sequence 28950, A
720	25	52.1	352	11	US-11-188-298-4175	Sequence 4175, Ap	793	25	52.1	510	11	US-11-188-298-17955	Sequence 17955, A
721	25	52.1	353	11	US-11-096-568A-22016	Sequence 22016, A	794	25	52.1	519	11	US-11-096-568A-23870	Sequence 23870, A
722	25	52.1	354	11	US-11-188-298-8794	Sequence 8794, Ap	795	25	52.1	521	11	US-11-094-917-9	Sequence 9, Appl1
723	25	52.1	355	11	US-11-096-568A-22015	Sequence 22015, A	796	25	52.1	523	11	US-11-096-568A-23869	Sequence 23869, A
724	25	52.1	358	11	US-11-188-298-8933	Sequence 8933, Ap	797	25	52.1	523	11	US-11-188-298-17955	Sequence 17955, A
725	25	52.1	358	11	US-11-188-298-16087	Sequence 16087, A	798	25	52.1	524	9	US-10-467-657-8122	Sequence 8122, Ap
726	25	52.1	364	11	US-11-096-568A-33771	Sequence 33771, A	799	25	52.1	524	11	US-11-188-298-3472	Sequence 3472, Ap
727	25	52.1	368	11	US-11-129-143-107	Sequence 107, App	800	25	52.1	525	11	US-11-096-568A-12402	Sequence 12402, A
728	25	52.1	371	11	US-11-096-568A-4680	Sequence 4680, Ap	801	25	52.1	533	11	US-11-188-298-1851	Sequence 1851, Ap
729	25	52.1	372	9	US-10-506-454-518	Sequence 518, App	802	25	52.1	533	11	US-11-188-298-20107	Sequence 20107, A
730	25	52.1	372	11	US-11-096-568A-22014	Sequence 22014, A	803	25	52.1	534	11	US-11-188-298-6317	Sequence 6317, Ap
731	25	52.1	377	11	US-11-188-298-3072	Sequence 3072, Ap	804	25	52.1	537	9	US-10-504-364-6	Sequence 6, Appl1
732	25	52.1	383	11	US-11-098-686-10660	Sequence 10660, A	805	25	52.1	537	11	US-10-504-364-7	Sequence 7, Appl1
733	25	52.1	383	11	US-11-096-568A-21959	Sequence 21959, A	806	25	52.1	537	11	US-11-188-298-10038	Sequence 10038, A
734	25	52.1	383	11	US-11-096-568A-22981	Sequence 22981, A	807	25	52.1	542	11	US-11-096-568A-26470	Sequence 26470, A
735	25	52.1	384	11	US-11-096-568A-23002	Sequence 23002, A	808	25	52.1	549	11	US-11-188-298-10232	Sequence 10232, A
736	25	52.1	384	11	US-11-188-298-471	Sequence 471, App	809	25	52.1	550	9	US-10-504-364-9	Sequence 9, Appl1
737	25	52.1	385	11	US-11-188-298-20370	Sequence 20370, A	810	25	52.1	550	11	US-10-821-233-1580	Sequence 1580, Ap
738	25	52.1	385	11	US-11-172-740-1441	Sequence 1441, Ap	811	25	52.1	551	9	US-10-504-364-1	Sequence 1, Appl1
739	25	52.1	388	11	US-11-079-463-8385	Sequence 8385, Ap	812	25	52.1	551	9	US-10-504-364-2	Sequence 2, Appl1
740	25	52.1	390	11	US-11-096-568A-11614	Sequence 11614, A	813	25	52.1	551	9	US-10-504-364-5	Sequence 5, Appl1
741	25	52.1	391	11	US-11-096-568A-21958	Sequence 21958, A	814	25	52.1	552	11	US-11-188-298-17331	Sequence 17331, A
742	25	52.1	391	11	US-11-096-568A-4679	Sequence 4679, Ap	815	25	52.1	554	11	US-11-096-568A-23868	Sequence 23868, A
743	25	52.1	398	11	US-11-096-568A-22980	Sequence 22980, A	816	25	52.1	556	11	US-11-188-298-7693	Sequence 7693, Ap
744	25	52.1	398	11	US-11-024-959-336	Sequence 336, App	817	25	52.1	560	11	US-11-096-568A-12401	Sequence 12401, A
745	25	52.1	399	11	US-11-087-099-469	Sequence 469, App	818	25	52.1	563	11	US-11-188-362-13	Sequence 13, Appl1
746	25	52.1	400	11	US-11-096-568A-4678	Sequence 4678, Ap	819	25	52.1	563	11	US-11-188-298-806	Sequence 806, App
747	25	52.1	401	11	US-11-079-463-5263	Sequence 5263, Ap	820	25	52.1	563	11	US-11-188-298-1674	Sequence 1674, Ap
748	25	52.1	401	11	US-11-096-568A-21957	Sequence 21957, A	821	25	52.1	563	11	US-11-188-298-3727	Sequence 3727, Ap
749	25	52.1	410	11	US-11-096-568A-22979	Sequence 22979, A	822	25	52.1	564	11	US-11-188-298-19019	Sequence 19019, A
750	25	52.1	411	9	US-10-989-649-3	Sequence 5681, Ap	823	25	52.1	564	11	US-11-188-298-1384	Sequence 1384, Ap
751	25	52.1	411	11	US-11-061-869-12	Sequence 3, Appl1	824	25	52.1	564	11	US-11-188-298-19324	Sequence 19324, A

825	25	52.1	564	11	US-11-188-298-20180	Sequence 20180, A	898	25	52.1	2250	9	US-10-511-096-6	Sequence 6, Appl1
826	25	52.1	565	9	US-10-455-772-448	Sequence 448, App	899	25	52.1	2252	9	US-10-511-096-8	Sequence 8, Appl1
827	25	52.1	585	11	US-11-188-298-577	Sequence 577, App	900	25	52.1	2314	11	US-11-097-728-2	Sequence 2, Appl1
828	25	52.1	610	11	US-11-188-298-14804	Sequence 14804, A	901	25	52.1	2334	11	US-11-097-728-6	Sequence 6, Appl1
829	25	52.1	632	11	US-11-188-298-4759	Sequence 4759, Ap	902	25	52.1	2612	9	US-10-453-372-38	Sequence 38, Appl1
830	25	52.1	632	11	US-11-188-298-13312	Sequence 13312, A	903	25	52.1	2630	11	US-11-186-731-2	Sequence 2, Appl1
831	25	52.1	632	11	US-11-188-298-18004	Sequence 18004, A	904	25	52.1	2669	9	US-10-453-372-36	Sequence 36, Appl1
832	25	52.1	634	11	US-11-188-298-17638	Sequence 17638, A	905	25	52.1	3104	9	US-10-453-372-32	Sequence 62, Appl1
833	25	52.1	639	11	US-11-188-298-5420	Sequence 5420, Ap	906	25	52.1	3140	9	US-10-453-372-62	Sequence 64, Appl1
834	25	52.1	644	11	US-11-087-099-9562	Sequence 9562, Ap	907	25	52.1	3140	9	US-10-453-372-42	Sequence 42, Appl1
835	25	52.1	645	11	US-11-072-512-2588	Sequence 2588, Ap	908	25	52.1	3483	9	US-10-453-372-30	Sequence 32, Appl1
836	25	52.1	646	11	US-11-188-298-1752	Sequence 1752, Ap	909	25	52.1	3546	9	US-10-453-372-32	Sequence 3478, Ap
837	25	52.1	656	11	US-11-188-298-6000	Sequence 6000, Ap	910	25	52.1	4443	11	US-11-129-741-3478	Sequence 460, App
838	25	52.1	668	11	US-11-087-099-10075	Sequence 10075, A	911	25	52.1	4473	11	US-11-129-741-460	Sequence 460, App
839	25	52.1	668	11	US-11-188-298-9288	Sequence 9288, Ap	912	25	52.1	4798	11	US-11-098-686-10232	Sequence 5, Appl1
840	25	52.1	673	11	US-11-079-463-9427	Sequence 9427, Ap	913	25	52.1	7968	11	US-11-186-731-5	Sequence 1032, A
841	25	52.1	680	11	US-11-188-298-8568	Sequence 8568, Ap	914	25	52.1	8746	11	US-11-096-568A-26064	Sequence 26064, A
842	25	52.1	694	9	US-10-491-468-24	Sequence 24, Appl	915	24.5	51.0	185	11	US-11-096-568A-26063	Sequence 26063, A
843	25	52.1	712	9	US-10-455-772-450	Sequence 450, App	916	24.5	51.0	206	11	US-11-096-568A-26063	Sequence 16, Appl
844	25	52.1	713	11	US-11-188-298-11318	Sequence 11318, A	917	24.5	51.0	404	11	US-11-241-677-16	Sequence 8142, Ap
845	25	52.1	713	9	US-10-055-877-156	Sequence 156, App	918	24.5	51.0	436	11	US-11-087-099-8142	Sequence 8142, Ap
846	25	52.1	737	9	US-11-087-099-10827	Sequence 10827, A	919	24.5	51.0	878	11	US-11-188-298-6160	Sequence 6160, Ap
847	25	52.1	744	11	US-11-147-109-8	Sequence 8, Appl1	920	24.5	51.0	939	11	US-11-188-298-10003	Sequence 10003, A
848	25	52.1	745	11	US-11-188-298-15647	Sequence 15647, A	921	24.5	51.0	1294	11	US-11-188-298-9682	Sequence 9682, Ap
849	25	52.1	746	11	US-11-188-298-12625	Sequence 12625, A	922	24.5	51.0	12	11	US-11-004-399-1185	Sequence 1185, Ap
850	25	52.1	748	11	US-11-096-568A-30629	Sequence 30629, A	923	24	50.0	20	11	US-11-127-601-6	Sequence 6, Appl1
851	25	52.1	750	11	US-10-506-454-717	Sequence 717, App	924	24	50.0	20	11	US-11-127-601-46	Sequence 46, Appl1
852	25	52.1	760	9	US-11-169-041-213	Sequence 213, App	925	24	50.0	25	11	US-11-004-399-2056	Sequence 2056, App
853	25	52.1	773	11	US-11-169-041-213	Sequence 213, App	926	24	50.0	26	11	US-11-226-657-110	Sequence 110, App
854	25	52.1	776	9	US-10-453-372-44	Sequence 44, Appl	927	24	50.0	27	9	US-10-509-686-5	Sequence 5, Appl1
855	25	52.1	776	9	US-10-453-372-46	Sequence 46, Appl	928	24	50.0	27	9	US-10-509-686-15	Sequence 15, Appl
856	25	52.1	810	11	US-11-096-568A-30628	Sequence 30628, A	929	24	50.0	27	9	US-10-509-686-16	Sequence 16, Appl
857	25	52.1	810	11	US-11-188-298-6945	Sequence 6945, Ap	930	24	50.0	35	11	US-11-207-078-205	Sequence 205, App
858	25	52.1	811	11	US-11-188-298-4728	Sequence 4728, Ap	931	24	50.0	37	9	US-10-467-657-6532	Sequence 6532, Ap
859	25	52.1	816	11	US-11-188-298-3225	Sequence 3225, Ap	932	24	50.0	40	11	US-11-004-399-144	Sequence 144, App
860	25	52.1	840	11	US-11-188-298-8662	Sequence 8662, Ap	933	24	50.0	40	11	US-11-004-399-514	Sequence 514, App
861	25	52.1	842	11	US-11-096-568A-30627	Sequence 30627, A	934	24	50.0	40	11	US-11-004-399-3769	Sequence 3769, Ap
862	25	52.1	846	11	US-11-096-568A-30404	Sequence 30404, A	935	24	50.0	42	10	US-11-301-554-1679	Sequence 1679, Ap
863	25	52.1	866	11	US-11-188-298-1933	Sequence 1933, Ap	936	24	50.0	43	9	US-10-957-8878-129	Sequence 129, App
864	25	52.1	873	11	US-11-096-568A-30403	Sequence 30403, A	937	24	50.0	45	11	US-11-123-896-168	Sequence 168, App
865	25	52.1	882	9	US-10-453-372-60	Sequence 60, Appl	938	24	50.0	47	11	US-11-000-463-285	Sequence 285, App
866	25	52.1	884	9	US-10-453-372-58	Sequence 58, Appl	939	24	50.0	47	11	US-11-000-463-757	Sequence 757, App
867	25	52.1	897	11	US-11-188-298-21076	Sequence 21076, A	940	24	50.0	61	7	US-09-978-160A-771	Sequence 771, App
868	25	52.1	914	11	US-11-188-298-10104	Sequence 10104, A	941	24	50.0	61	11	US-11-264-096-1766	Sequence 1706, Ap
869	25	52.1	935	9	US-10-995-551-1012	Sequence 1012, Ap	942	24	50.0	63	11	US-11-096-568A-12008	Sequence 1206, Ap
870	25	52.1	935	9	US-10-995-551-1013	Sequence 1013, Ap	943	24	50.0	63	11	US-11-096-568A-6136	Sequence 6126, Ap
871	25	52.1	939	11	US-11-188-298-9337	Sequence 9337, Ap	944	24	50.0	67	11	US-11-079-463-9337	Sequence 9337, Ap
872	25	52.1	969	9	US-10-055-877-214	Sequence 214, App	945	24	50.0	68	9	US-10-986-501-125	Sequence 32, App
873	25	52.1	974	11	US-11-188-298-15681	Sequence 15681, A	946	24	50.0	70	11	US-11-096-568A-12007	Sequence 12007, A
874	25	52.1	1006	9	US-10-793-626-154	Sequence 154, App	947	24	50.0	70	11	US-11-264-096-1040	Sequence 1040, Ap
875	25	52.1	1019	8	US-10-511-937-2984	Sequence 2984, Ap	948	24	50.0	71	9	US-10-467-657-750	Sequence 750, App
876	25	52.1	1033	9	US-10-921-415-1	Sequence 1, Appl1	949	24	50.0	72	11	US-11-123-896-167	Sequence 167, App
877	25	52.1	1033	9	US-10-501-841-15	Sequence 15, Appl	950	24	50.0	73	9	US-10-467-657-5022	Sequence 5022, App
878	25	52.1	1033	9	US-11-055-822-100	Sequence 100, App	951	24	50.0	75	11	US-11-188-298-5386	Sequence 5386, Ap
879	25	52.1	1045	11	US-11-096-568A-30402	Sequence 30402, A	952	24	50.0	76	9	US-10-467-657-6010	Sequence 6010, Ap
880	25	52.1	1073	11	US-11-098-298-10413	Sequence 10413, A	953	24	50.0	82	11	US-11-098-886-10504	Sequence 10504, A
881	25	52.1	1081	11	US-11-098-298-21987	Sequence 21987, A	954	24	50.0	84	11	US-11-096-568A-8649	Sequence 8649, Ap
882	25	52.1	1082	11	US-11-188-298-7629	Sequence 7629, Ap	955	24	50.0	84	11	US-11-079-463-6759	Sequence 6759, App
883	25	52.1	1102	11	US-11-079-463-9508	Sequence 9508, Ap	956	24	50.0	91	11	US-11-045-004-2320	Sequence 2320, Ap
884	25	52.1	1133	9	US-10-821-234-1519	Sequence 1219, Ap	957	24	50.0	92	11	US-11-096-568A-11794	Sequence 11794, A
885	25	52.1	1203	11	US-11-188-298-3035	Sequence 3035, App	958	24	50.0	97	11	US-11-096-568A-13372	Sequence 13372, A
886	25	52.1	1224	11	US-11-188-298-7648	Sequence 7648, Ap	959	24	50.0	98	11	US-11-096-568A-13372	Sequence 13372, A
887	25	52.1	1261	9	US-11-188-298-8382	Sequence 8382, Ap	960	24	50.0	101	8	US-10-511-937-2449	Sequence 2449, App
888	25	52.1	1356	9	US-10-922-232B-63	Sequence 63, Appl	961	24	50.0	101	9	US-10-475-075-173	Sequence 173, App
889	25	52.1	1445	11	US-11-166-041-181	Sequence 181, App	962	24	50.0	101	9	US-10-475-075-174	Sequence 174, App
890	25	52.1	1495	11	US-11-019-711-111	Sequence 111, App	963	24	50.0	101	9	US-10-475-075-174	Sequence 174, App
891	25	52.1	1750	11	US-11-087-099-12397	Sequence 12397, A	964	24	50.0	101	9	US-10-475-075-174	Sequence 174, App
892	25	52.1	1827	11	US-11-057-058-62	Sequence 62, Appl	965	24	50.0	101	11	US-11-195-095-13	Sequence 28, Appl
893	25	52.1	1841	11	US-11-057-058-63	Sequence 63, Appl	966	24	50.0	104	11	US-11-195-095-13	Sequence 13, Appl
894	25	52.1	1902	9	US-10-453-372-1004	Sequence 1004, Ap	967	24	50.0	107	11	US-11-105-668-16	Sequence 1235, Ap
895	25	52.1	1954	9	US-10-784-004-1235	Sequence 1235, Ap	968	24	50.0	108	9	US-10-467-657-4266	Sequence 4266, Ap
896	25	52.1	2228	9	US-10-511-096-2	Sequence 2, Appl1	969	24	50.0	110	11	US-11-179-820-3	Sequence 3, Appl1
897	25	52.1	2230	9	US-10-511-096-4	Sequence 4, Appl1	970	24	50.0	112	9	US-10-982-440-48	Sequence 48, Appl

```
971 24 50.0 112 11 US-11-075-184A-1 Sequence 1, Appl1
972 24 50.0 112 11 US-11-075-184A-3 Sequence 3, Appl1
973 24 50.0 112 11 US-11-075-184A-4 Sequence 4, Appl1
974 24 50.0 112 11 US-11-075-184A-5 Sequence 5, Appl1
975 24 50.0 112 11 US-11-075-184A-6 Sequence 6, Appl1
976 24 50.0 112 11 US-11-075-184A-7 Sequence 7, Appl1
977 24 50.0 112 11 US-11-131-425A-102 Sequence 102, Appl1
978 24 50.0 112 11 US-11-131-425A-137 Sequence 137, Appl1
979 24 50.0 114 11 US-11-037-199-3 Sequence 3, Appl1
980 24 50.0 114 11 US-11-096-568A-13371 Sequence 13371, A
981 24 50.0 115 11 US-11-171-567-210 Sequence 210, App
982 24 50.0 119 11 US-11-188-298-1679 Sequence 1679, Ap
983 24 50.0 121 11 US-11-188-298-16307 Sequence 16307, A
984 24 50.0 122 11 US-11-264-096-2104 Sequence 2104, Ap
985 24 50.0 122 11 US-11-264-096-2105 Sequence 2105, Ap
986 24 50.0 128 9 US-10-993-543-108 Sequence 108, App
987 24 50.0 128 11 US-11-049-536-102 Sequence 102, App
988 24 50.0 132 9 US-10-789-739-102 Sequence 102, App
989 24 50.0 132 9 US-10-789-733-2 Sequence 2, Appl1
990 24 50.0 132 9 US-10-789-733-5 Sequence 5, Appl1
991 24 50.0 132 9 US-10-789-733-11 Sequence 11, Appl1
992 24 50.0 134 11 US-11-052-554A-88 Sequence 88, Appl1
993 24 50.0 138 11 US-11-098-686-10560 Sequence 10560, A
994 24 50.0 139 11 US-11-128-900-25 Sequence 25, Appl1
995 24 50.0 139 11 US-11-128-900-114 Sequence 114, App
996 24 50.0 140 11 US-11-096-568A-15693 Sequence 15693, A
997 24 50.0 145 11 US-11-079-463-9226 Sequence 9226, Ap
998 24 50.0 148 9 US-10-213-292-39 Sequence 39, Appl1
999 24 50.0 151 11 US-11-096-568A-14315 Sequence 14315, A
1000 24 50.0 152 8 US-10-505-928-807 Sequence 807, App
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-1712
; Sequence 1712, Application US/10530061
; Publication No. US2006009453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1712
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1712

Query Match      100.0%; Score 48; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.002;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
      |||||
Db      3 RLCVOSTHV 11

RESULT 2
US-11-041-893-101
; Sequence 101, Application US/11041893
```

```
; Publication No. US20060002941A1
; GENERAL INFORMATION:
; APPLICANT: Mahataas, Gregory G.
; TITLE OF INVENTION: COMPOSITIONS COMPRISING IMMUNE RESPONSE
; FILE REFERENCE: 100123, 401
; CURRENT APPLICATION NUMBER: US/11/041,893
; CURRENT FILING DATE: 2005-01-24
; PRIOR APPLICATION NUMBER: US 60/616,855
; PRIOR FILING DATE: 2004-10-06
; PRIOR APPLICATION NUMBER: US 60/538,713
; PRIOR FILING DATE: 2004-01-23
; NUMBER OF SEQ ID NOS: 295
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 101
; LENGTH: 35
; TYPE: PRT
; ORGANISM: Human Papillomavirus E7
US-11-041-893-101

Query Match      100.0%; Score 48; DB 11; Length 35;
Best Local Similarity 100.0%; Pred. No. 0.0045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
      |||||
Db      24 RLCVOSTHV 32
```

```
RESULT 3
US-10-511-814-8
; Sequence 8, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT APPLICATION NUMBER: US/10/511,814
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-8
```

```
Query Match      100.0%; Score 48; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.012;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 RLCVOSTHV 9
      |||||
Db      66 RLCVOSTHV 74
```

```
RESULT 4
US-10-511-814-11
; Sequence 11, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
```

```
/ CURRENT APPLICATION NUMBER: US/10/511,814
/ CURRENT FILING DATE: 2004-10-19
/ PRIOR APPLICATION NUMBER: PCT/US03/12667
/ PRIOR FILING DATE: 2003-04-21
/ PRIOR APPLICATION NUMBER: 60/374,245
/ PRIOR FILING DATE: 2002-04-19
/ NUMBER OF SEQ ID NOS: 21
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 11
/ LENGTH: 98
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence:/Note =
/ OTHER INFORMATION: Synthetic Construct
US-10-511-814-11
```

```
Query Match 100.0%; Score 48; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.012;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74
```

```
RESULT 5
US-10-530-253-14
/ Sequence 14, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casaretti, Maria C.
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 14
/ LENGTH: 98
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 16
US-10-530-253-14
```

```
Query Match 100.0%; Score 48; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.012;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74
```

```
RESULT 6
US-11-179-478-4
/ Sequence 4, Application US/11179478
/ Publication No. US20050249745A1
/ GENERAL INFORMATION:
/ APPLICANT: BURGER, Alexander
/ APPLICANT: HALLER, Michael
/ TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
/ NUMBER OF INVENTION: FORMULATIONS AND METHODS OF USE
/ NUMBER OF SEQUENCES: 28
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: FOLEY & LARDNER
/ STREET: 3000 K Street, N.W.
```

```
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: U.S.A.
/ ZIP: 20007-5109
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: IBM PC compatible
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/11/179,478
/ FILING DATE: 13-JULY-2005
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/10/654,129
/ FILING DATE: 04-Sep-2003
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Sandercoc, Colin G.
/ REGISTRATION NUMBER: 31,298
/ REFERENCE/DOCKET NUMBER: 37067/102
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 672-5300
/ TELEFAX: (202) 672-5399
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 98 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-11-179-478-4
```

```
Query Match 100.0%; Score 48; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.012;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74
```

```
RESULT 7
US-10-530-253-1
/ Sequence 1, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casaretti, Maria C.
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 1
/ LENGTH: 248
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 16
US-10-530-253-1
```

```
Query Match 100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 RLCVOSTHV 9
DB 216 RLCVOSTHV 224
```

```
RESULT 8
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhiney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT FILING DATE: 2005-04-04
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match          100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 216 RLCVOSTHV 224

RESULT 9
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhiney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT FILING DATE: 2005-04-04
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match          100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 216 RLCVOSTHV 224

RESULT 10
US-10-530-253-7
; Sequence 7, Application US/10530253
```

```
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhiney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT FILING DATE: 2005-04-04
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7

Query Match          100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 11
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhiney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT FILING DATE: 2005-04-04
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9

Query Match          100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RLCVOSTHV 9
DB 66 RLCVOSTHV 74

RESULT 12
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
```

```
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11

Query Match      100.0%; Score 48; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTHV 74

RESULT 13
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANQ, XIOMU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
; CURRENT APPLICATION NUMBER: US/11/192,923A
; CURRENT FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match      100.0%; Score 48; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.029;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTHV 74

RESULT 14
US-10-530-253-30
; Sequence 30, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casaretti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
```

```
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus type 35
US-10-530-253-30

Query Match      97.9%; Score 47; DB 9; Length 99;
Best Local Similarity 88.9%; Pred. No. 0.019;
Matches 8; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
        |||||
Db      67 RLCVQSTHI 75

RESULT 15
US-10-530-253-28
; Sequence 28, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casaretti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 31
US-10-530-253-28

Query Match      83.3%; Score 40; DB 9; Length 98;
Best Local Similarity 88.9%; Pred. No. 0.046;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 RLCVQSTHV 9
        |||||
Db      66 RLCVQSTOV 74

RESULT 16
US-11-096-568A-26771
; Sequence 26771, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 26771
; LENGTH: 799
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)_(799)
; OTHER INFORMATION: Ceres Seq. ID no. 13600313
```

US-11-096-568A-26771

Query Match 77.1%; Score 37; DB 11; Length 799;
Best Local Similarity 55.6%; Pred. No. 13;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 RLCTGSTHV 9
|||:|:|:
Db 52 RLCTGAEHI 60

RESULT 17

US-11-096-568A-26770
; Sequence 26770; Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 26770
; LENGTH: 842
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(842)
; OTHER INFORMATION: Cereals Seq. ID no. 13600312
US-11-096-568A-26770

Query Match 77.1%; Score 37; DB 11; Length 842;
Best Local Similarity 55.6%; Pred. No. 13;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 RLCTGSTHV 9
|||:|:|:
Db 95 RLCTGAEHI 103

RESULT 18
US-11-096-568A-26769
; Sequence 26769; Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 26769
; LENGTH: 849
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(849)
; OTHER INFORMATION: Cereals Seq. ID no. 13600311
US-11-096-568A-26769

Query Match 77.1%; Score 37; DB 11; Length 849;
Best Local Similarity 55.6%; Pred. No. 13;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 RLCTGSTHV 9
|||:|:|:
Db 102 RLCTGAEHI 110

RESULT 19

US-10-745-586-153
; Sequence 153; Application US/10745586
; Publication No. US2006006327A1
; GENERAL INFORMATION:
; APPLICANT: Jacobs, Kenneth
; APPLICANT: McCoy, John M.
; APPLICANT: Lavelle, Edward R.
; APPLICANT: Collins-Racie, Lisa A.
; APPLICANT: Evans, Cheryl
; APPLICANT: Merberg, David
; APPLICANT: Treacy, Maurice
; APPLICANT: Bowman, Michael R.
; APPLICANT: Spaulding, Vikki
; APPLICANT: Agostino, Michael J.
; TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
; FILE REFERENCE: GI 6011-18X
; CURRENT APPLICATION NUMBER: US/10/745,586
; CURRENT FILING DATE: 2003-12-29
; PRIOR APPLICATION NUMBER: US/09/398,829
; PRIOR FILING DATE: 1999-09-17
; NUMBER OF SEQ ID NOS: 283
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 153
; LENGTH: 910
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (43)
US-10-745-586-153

Query Match 72.9%; Score 35; DB 9; Length 910;
Best Local Similarity 62.5%; Pred. No. 36;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCVQSTHV 9
:|:|:|:
Db 868 ICVNSTHI 875

RESULT 20
US-11-078-951-2
; Sequence 2; Application US/11078951
; Publication No. US20050272119A1
; GENERAL INFORMATION:
; APPLICANT: Kubota, Kazuishi; Nakahara, Kaori
; APPLICANT: Hara, Aayako; Ozeki, Yohel
; APPLICANT: Iijima, Yasuteru
; TITLE OF INVENTION: 2',5'-Oligoadenylate phosphodiesterase
; FILE REFERENCE: 05090C/HG
; CURRENT APPLICATION NUMBER: US/11/078,951
; CURRENT FILING DATE: 2005-03-11
; PRIOR APPLICATION NUMBER: JP 2002-267797
; PRIOR FILING DATE: 2002-09-13
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 609
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-078-951-2

Query Match 70.8%; Score 34; DB 11; Length 609;
Best Local Similarity 55.6%; Pred. No. 39;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 RLCTGSTHV 9
:|:|:|:
Db 449 RIVVANTHL 457

```
RESULT 21
US-10-502-145-15
; Sequence 15, Application US/10502145
; Publication No. US20050244406A1
; GENERAL INFORMATION:
; APPLICANT: MACKAY, CHARLES REAY
; TITLE OF INVENTION: Anti-C5ar antibodies and uses thereof
; FILE REFERENCE: RICE-032
; CURRENT APPLICATION NUMBER: US/10/502,145
; PRIOR FILING DATE: 2004-07-19
; PRIOR APPLICATION NUMBER: USSN 60/350,961
; PRIOR FILING DATE: 2002-01-25
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 15
; LENGTH: 112
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-502-145-15

Query Match      68.8%; Score 33; DB 9; Length 112;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3  CVOSTHV 9
      | | | | |
      93  CSOSTHV 99

RESULT 22
US-10-507-662-39
; Sequence 39, Application US/10507662
; Publication No. US20050255102A1
; GENERAL INFORMATION:
; APPLICANT: BIOGEN, INC.
; TITLE OF INVENTION: ANTI-ALPHA-V BETA-6 ANTIBODIES
; FILE REFERENCE: A136PCT
; CURRENT APPLICATION NUMBER: US/10/507,662
; PRIOR FILING DATE: 2004-09-13
; PRIOR APPLICATION NUMBER: 60/364,991
; PRIOR FILING DATE: 2002-03-13
; PRIOR APPLICATION NUMBER: 60/426,286
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
; LENGTH: 112
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-507-662-39

Query Match      68.8%; Score 33; DB 9; Length 112;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3  CVOSTHV 9
      | | | | |
      93  CSOSTHV 99

RESULT 23
US-10-487-324A-7
; Sequence 7, Application US/10487324A
; Publication No. US20060073149A1
; GENERAL INFORMATION:
; APPLICANT: Bales, Kelly R
; APPLICANT: Paul, Steven M
; APPLICANT: Dodart, Jean-Cosme F
; TITLE OF INVENTION: Rapid Improvement of Cognition in Conditions Related to A-beta
; FILE REFERENCE: X-15240
; CURRENT APPLICATION NUMBER: US/10/487,324A
; CURRENT FILING DATE: 2004-02-17
```

```
; PRIOR APPLICATION NUMBER: 60/313,232
; PRIOR FILING DATE: 2001-08-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 113
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: humanized antibody
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)_(113)
; OTHER INFORMATION: humanized antibody 266 preferred light chain variable
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (109)..(109)
; OTHER INFORMATION: Xaa is Val or Leu
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (108)..(108)
; OTHER INFORMATION: Xaa is Lys or Arg
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (105)..(105)
; OTHER INFORMATION: Xaa is Gln or Gly
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (88)..(88)
; OTHER INFORMATION: Xaa is Val or Leu
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (50)..(50)
; OTHER INFORMATION: Xaa is Arg, Gln, or Lys
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (14)..(14)
; OTHER INFORMATION: Xaa is Thr or Ser
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (7)..(7)
; OTHER INFORMATION: Xaa is Ser or Thr
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (2)..(2)
; OTHER INFORMATION: Xaa is Val or Ile
US-10-487-324A-7

Query Match      68.8%; Score 33; DB 9; Length 113;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3  CVOSTHV 9
      | | | | |
      93  CSOSTHV 99

RESULT 24
US-10-487-324A-9
; Sequence 9, Application US/10487324A
; Publication No. US20060073149A1
; GENERAL INFORMATION:
; APPLICANT: Bales, Kelly R
; APPLICANT: Paul, Steven M
; APPLICANT: Dodart, Jean-Cosme F
```

```

; TITLE OF INVENTION: Rapid Improvement of Cognition in Conditions Related to A-beta
; FILE REFERENCE: X-15240
; CURRENT APPLICATION NUMBER: US/10/487,324A
; CURRENT FILING DATE: 2004-02-17
; PRIOR APPLICATION NUMBER: 60/313,232
; PRIOR FILING DATE: 2001-08-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 113
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: humanized antibody
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(113)
; OTHER INFORMATION: humanized antibody 266 preferred light chain variable
US-10-487-324A-9

Query Match          68.8%; Score 33; DB 9; Length 113;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVQSTHV 9
DB 93 CSQSTHV 99

RESULT 25
US-11-224-623-7
; Sequence 7, Application US/11224623
; Publication No. US2006003906A1
; GENERAL INFORMATION:
; APPLICANT: ELI LILLY AND COMPANY and WASHINGTON UNIVERSITY
; TITLE OF INVENTION: Humanized Antibodies that Sequester Amyloid Beta Peptide
; FILE REFERENCE: 8792/293
; CURRENT APPLICATION NUMBER: US/11/224,623
; CURRENT FILING DATE: 2005-09-12
; PRIOR APPLICATION NUMBER: US/10/226,435
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US01/06191
; PRIOR FILING DATE: 2001-02-26
; PRIOR APPLICATION NUMBER: 60/184,601
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/254,465
; PRIOR FILING DATE: 2000-12-08
; PRIOR APPLICATION NUMBER: 60/254,498
; PRIOR FILING DATE: 2000-12-08
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 113
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Humanized antibodies
; NAME/KEY: MISC FEATURE
; LOCATION: (2)..(2)
; OTHER INFORMATION: Xaa at position 2 is Val or Ile
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (7)..(7)
; OTHER INFORMATION: Xaa at position 7 is Ser or Thr
; NAME/KEY: MISC FEATURE
; LOCATION: (14)..(14)
; OTHER INFORMATION: Xaa at position 14 is Thr or Ser
; NAME/KEY: MISC FEATURE
; LOCATION: (15)..(15)
; OTHER INFORMATION: Xaa at position 15 is Leu or Pro

```

```

; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (30)..(30)
; OTHER INFORMATION: Xaa at position 30 is Ile or Val
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (50)..(50)
; OTHER INFORMATION: Xaa at position 50 is Arg, Gln, or Lys
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (88)..(88)
; OTHER INFORMATION: Xaa at position 88 is Val or Leu
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (105)..(105)
; OTHER INFORMATION: Xaa at position 105 is Gln or Gly
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (108)..(108)
; OTHER INFORMATION: Xaa at position 108 is Lys or Arg
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (109)..(109)
; OTHER INFORMATION: Xaa at position 109 is Val or Leu
US-11-224-623-7

Query Match          68.8%; Score 33; DB 11; Length 113;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVQSTHV 9
DB 93 CSQSTHV 99

RESULT 26
US-11-224-623-9
; Sequence 9, Application US/11224623
; Publication No. US2006003906A1
; GENERAL INFORMATION:
; APPLICANT: ELI LILLY AND COMPANY and WASHINGTON UNIVERSITY
; TITLE OF INVENTION: Humanized Antibodies that Sequester Amyloid Beta Peptide
; FILE REFERENCE: 8792/293
; CURRENT APPLICATION NUMBER: US/11/224,623
; CURRENT FILING DATE: 2005-09-12
; PRIOR APPLICATION NUMBER: US/10/226,435
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US01/06191
; PRIOR FILING DATE: 2001-02-26
; PRIOR APPLICATION NUMBER: 60/184,601
; PRIOR FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: 60/254,465
; PRIOR FILING DATE: 2000-12-08
; PRIOR APPLICATION NUMBER: 60/254,498
; PRIOR FILING DATE: 2000-12-08
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 113
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Humanized antibodies
US-11-224-623-9

Query Match          68.8%; Score 33; DB 11; Length 113;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVQSTHV 9
DB 93 CSQSTHV 99

```


RESULT 27
US-11-259-232-45
; Sequence 45, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hseel, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
; FILE REFERENCE: P1085R6
; CURRENT APPLICATION NUMBER: US/11/259,232
; PRIOR FILING DATE: 2005-10-25
; PRIOR APPLICATION NUMBER: US/09/489,394
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 60/116,787
; PRIOR FILING DATE: 1999-01-21
; NUMBER OF SEQ ID NOS: 72
; SEQ ID NO 45
; LENGTH: 114
; TYPE: PRT
; ORGANISM: Mus musculus
US-11-259-232-45

Query Match 68.8%; Score 33; DB 11; Length 114;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
| | | | |
Db 94 CSQSTHV 100

RESULT 28
US-11-259-232-46
; Sequence 46, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hseel, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
; FILE REFERENCE: P1085R6
; CURRENT APPLICATION NUMBER: US/11/259,232
; PRIOR FILING DATE: 2005-10-25
; PRIOR APPLICATION NUMBER: US/09/489,394
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 60/116,787
; PRIOR FILING DATE: 1999-01-21
; NUMBER OF SEQ ID NOS: 72
; SEQ ID NO 46
; LENGTH: 114
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: Artificial Sequence
; LOCATION: 1-114
; OTHER INFORMATION: recombinant immunoglobulin
US-11-259-232-46

Query Match 68.8%; Score 33; DB 11; Length 114;
Best Local Similarity 85.7%; Pred. No. 13;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
| | | | |
Db 94 CSQSTHV 100

RESULT 29
US-11-259-232-35
; Sequence 35, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hseel, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
; FILE REFERENCE: P1085R6
; CURRENT APPLICATION NUMBER: US/11/259,232
; PRIOR FILING DATE: 2005-10-25
; PRIOR APPLICATION NUMBER: US/09/489,394
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 60/116,787
; PRIOR FILING DATE: 1999-01-21
; NUMBER OF SEQ ID NOS: 72
; SEQ ID NO 35
; LENGTH: 131
; TYPE: PRT
; ORGANISM: Mus musculus
US-11-259-232-35

Query Match 68.8%; Score 33; DB 11; Length 131;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
| | | | |
Db 93 CSQSTHV 99

RESULT 30
US-11-074-373-37
; Sequence 37, Application US/11074373
; Publication No. US20060024302A1
; GENERAL INFORMATION:
; APPLICANT: Achen et al.
; TITLE OF INVENTION: CHIMERIC ANTI-VEGF-D ANTIBODIES AND HUMANIZED ANTI-VEGF-D ANTIBODIES
; FILE REFERENCE: 28967/39969A
; CURRENT APPLICATION NUMBER: US/11/074,373
; CURRENT FILING DATE: 2005-03-07
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 37
; LENGTH: 132
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-074-373-37

Query Match 68.8%; Score 33; DB 11; Length 132;
Best Local Similarity 85.7%; Pred. No. 15;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
| | | | |
Db 112 CSQSTHV 118

RESULT 31
US-11-055-163-15
; Sequence 15, Application US/11055163
; Publication No. US20050271655A1
; GENERAL INFORMATION:
; APPLICANT: LEE, DANIEL H.S.
; APPLICANT: PEPINSKY, R. BLAKE
; APPLICANT: LI, WEIWEI
; APPLICANT: RABACCHI, SYLVIA A.
; APPLICANT: RELTON, JANE K.
; APPLICANT: WORLEY, DANE S.

```
APPLICANT: STRITTMATER, STEPHEN M.
APPLICANT: SAH, DINAH Y.W.
TITLE OF INVENTION: NOGO RECEPTOR ANTAGONISTS
FILE REFERENCE: A170 CON (00455.271)
CURRENT APPLICATION NUMBER: US/11/055,163
PRIOR FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: PCT/US03/25004
PRIOR FILING DATE: 2003-08-07
PRIOR APPLICATION NUMBER: 60/402,866
PRIOR FILING DATE: 2002-08-10
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 15
LENGTH: 144
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-11-055-163-15
```

```
Query Match      68.8%; Score 33; DB 11; Length 144;
Best Local Similarity 85.7%; Pred. No. 16;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
OY      3 CVOSTHV 9
      | | | | |
Db      112 CSOSTHV 118
```

```
RESULT 32
US-11-055-163-16
Sequence 16, Application US/11055163
Publication No. US20050271655A1
GENERAL INFORMATION:
APPLICANT: LEE, DANIEL H.S.
APPLICANT: PEPINSKY, R. BLAKE
APPLICANT: LI, WEIWEI
APPLICANT: RABACCHI, SYLVIA A.
APPLICANT: REITON, JANE K.
APPLICANT: MORLEY, DANE S.
APPLICANT: STRITTMATER, STEPHEN M.
APPLICANT: SAH, DINAH Y.W.
TITLE OF INVENTION: NOGO RECEPTOR ANTAGONISTS
FILE REFERENCE: A170 CON (00455.271)
CURRENT APPLICATION NUMBER: US/11/055,163
CURRENT FILING DATE: 2005-02-10
PRIOR APPLICATION NUMBER: PCT/US03/25004
PRIOR FILING DATE: 2003-08-07
PRIOR APPLICATION NUMBER: 60/402,866
PRIOR FILING DATE: 2002-08-10
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 16
LENGTH: 144
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-11-055-163-16
```

```
Query Match      68.8%; Score 33; DB 11; Length 144;
Best Local Similarity 85.7%; Pred. No. 16;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
OY      3 CVOSTHV 9
      | | | | |
Db      112 CSOSTHV 118
```

```
RESULT 33
US-10-487-324A-11
```

```
Sequence 11, Application US/10487324A
Publication No. US20060073149A1
GENERAL INFORMATION:
APPLICANT: Bales, Kelly R
APPLICANT: Paul, Steven M
APPLICANT: Dodart, Jean-Cosme F
TITLE OF INVENTION: Rapid Improvement of Cognition in Conditions Related to A-beta
FILE REFERENCE: X-15240
CURRENT APPLICATION NUMBER: US/10/487,324A
CURRENT FILING DATE: 2004-02-17
PRIOR APPLICATION NUMBER: 60/313,232
PRIOR FILING DATE: 2001-08-17
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn version 3.1
SEQ ID NO 11
LENGTH: 219
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: humanized antibody
NAME/KEY: MISC FEATURE
LOCATION: (1)-(219)
OTHER INFORMATION: humanized 266 antibody preferred light chain
US-10-487-324A-11
```

```
Query Match      68.8%; Score 33; DB 9; Length 219;
Best Local Similarity 85.7%; Pred. No. 24;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
OY      3 CVOSTHV 9
      | | | | |
Db      93 CSOSTHV 99
```

```
RESULT 34
US-11-224-623-11
Sequence 11, Application US/11224623
Publication No. US20060039906A1
GENERAL INFORMATION:
APPLICANT: ELI LILLY AND COMPANY AND WASHINGTON UNIVERSITY
TITLE OF INVENTION: Humanized Antibodies that Sequester Amyloid Beta Peptide
FILE REFERENCE: 8792/293
CURRENT APPLICATION NUMBER: US/11/224,623
CURRENT FILING DATE: 2005-09-12
PRIOR APPLICATION NUMBER: US/10/226,435
PRIOR FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: PCT/US01/06191
PRIOR FILING DATE: 2001-02-26
PRIOR APPLICATION NUMBER: 60/184,601
PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: 60/254,465
PRIOR FILING DATE: 2000-12-08
PRIOR APPLICATION NUMBER: 60/254,498
PRIOR FILING DATE: 2000-12-08
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.1
SEQ ID NO 11
LENGTH: 219
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Humanized antibodies
US-11-224-623-11
```

```
Query Match      68.8%; Score 33; DB 11; Length 219;
Best Local Similarity 85.7%; Pred. No. 24;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
OY      3 CVOSTHV 9
      | | | | |
Db      93 CSOSTHV 99
```

RESULT 35
US-11-259-232-72
Sequence 72: Application US/11259232
Publication No. US20060083683A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc., Hseel, Vanessa
APPLICANT: Koumenis, Iphigenia
APPLICANT: Leong, Steven R.
APPLICANT: Shirokh, Zahra
APPLICANT: Zapata, Gerardo A.
TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
FILE REFERENCE: P108586
CURRENT APPLICATION NUMBER: US/11/259,232
CURRENT FILING DATE: 2005-10-25
PRIOR APPLICATION NUMBER: US/09/489,394
PRIOR FILING DATE: 2000-01-21
PRIOR APPLICATION NUMBER: US 60/116,787
PRIOR FILING DATE: 1999-01-21
NUMBER OF SEQ ID NOS: 72
SEQ ID NO 72
LENGTH: 219
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: Artificial Sequence
LOCATION: 1-219
OTHER INFORMATION: recombinant immunoglobulin
US-11-259-232-72

Query Match 68.8%; Score 33; DB 11; Length 219;
Best Local Similarity 85.7%; Pred. No. 24;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVQSTHV 9
DB 93 CSQSTHV 99

RESULT 36
US-11-239-510-21
Sequence 21: Application US/11239510
Publication No. US20060063715A1
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
Wood, James F.
Hardman, Karl
Bird, Robert
Filpula, David
Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSER: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/239,510
FILING DATE: 29-Sep-2005
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/137,297
FILING DATE: 03-May-2002
APPLICATION NUMBER: US/09/443,213
FILING DATE: <Unknown>

APPLICATION NUMBER: US 09/166,094
FILING DATE: 05-OCT-1998
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977,003000E
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 238 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 21:
US-11-239-510-21

Query Match 68.8%; Score 33; DB 11; Length 238;
Best Local Similarity 85.7%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVQSTHV 9
DB 93 CSQSTHV 99

RESULT 37
US-11-239-510-11
Sequence 11: Application US/11239510
Publication No. US20060063715A1
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
Wood, James F.
Hardman, Karl
Bird, Robert
Filpula, David
Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSER: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/239,510
FILING DATE: 29-Sep-2005
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/137,297
FILING DATE: 03-May-2002
APPLICATION NUMBER: US/09/443,213
FILING DATE: 05-OCT-1998
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992

```

; APPLICATION NUMBER: US 07/796,936
; FILING DATE: 25-NOV-1991
; ATTORNEY/AGENT INFORMATION:
;   NAME: Goldstein, Jorge A.
;   REGISTRATION NUMBER: 29,021
;   REFERENCE/DOCKET NUMBER: 0977,003000E
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (202) 371-2600
;   TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 11:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 240 amino acids
;     TYPE: amino acid
;     TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-11-239-510-11

Query Match      68.8%; Score 33; DB 11; Length 240;
Best Local Similarity 85.7%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 CVQSTHV 9
      | | | | |
Db      93 CSQSTHV 99

RESULT 38
US-11-259-232-42
; Sequence 42, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:
;   APPLICANT: Genentech, Inc., Haei, Vanessa
;   APPLICANT: Koumenis, Iphigenia
;   APPLICANT: Leong, Steven R.
;   APPLICANT: Shahrokh, Zahra
;   APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
; FILE REFERENCE: P1085R6
; CURRENT APPLICATION NUMBER: US/11/259,232
; CURRENT FILING DATE: 2005-10-25
; PRIOR APPLICATION NUMBER: US/09/489,394
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 60/116,787
; PRIOR FILING DATE: 1999-01-21
; NUMBER OF SEQ ID NOS: 72
; SEQ ID NO 42
; LENGTH: 242
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
;   NAME/KEY: Artificial Sequence
;   LOCATION: 1-242
; OTHER INFORMATION: recombinant immunoglobulin
US-11-259-232-42

Query Match      68.8%; Score 33; DB 11; Length 242;
Best Local Similarity 85.7%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 CVQSTHV 9
      | | | | |
Db      116 CSQSTHV 122

RESULT 39
US-11-259-232-51
; Sequence 51, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:
;   APPLICANT: Genentech, Inc., Haei, Vanessa
;   APPLICANT: Koumenis, Iphigenia
;   APPLICANT: Leong, Steven R.
; APPLICATION: Koumenis, Iphigenia
; APPLICATION: Leong, Steven R.

```

```

; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
; FILE REFERENCE: P1085R6
; CURRENT APPLICATION NUMBER: US/11/259,232
; CURRENT FILING DATE: 2005-10-25
; PRIOR APPLICATION NUMBER: US/09/489,394
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 60/116,787
; PRIOR FILING DATE: 1999-01-21
; NUMBER OF SEQ ID NOS: 72
; SEQ ID NO 51
; LENGTH: 242
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
;   NAME/KEY: Artificial Sequence
;   LOCATION: 1-242
; OTHER INFORMATION: recombinant immunoglobulin
US-11-259-232-51

Query Match      68.8%; Score 33; DB 11; Length 242;
Best Local Similarity 85.7%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 CVQSTHV 9
      | | | | |
Db      116 CSQSTHV 122

RESULT 40
US-11-259-232-56
; Sequence 56, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:
;   APPLICANT: Genentech, Inc., Haei, Vanessa
;   APPLICANT: Koumenis, Iphigenia
;   APPLICANT: Leong, Steven R.
;   APPLICANT: Shahrokh, Zahra
;   APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
; FILE REFERENCE: P1085R6
; CURRENT APPLICATION NUMBER: US/11/259,232
; CURRENT FILING DATE: 2005-10-25
; PRIOR APPLICATION NUMBER: US/09/489,394
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 60/116,787
; PRIOR FILING DATE: 1999-01-21
; NUMBER OF SEQ ID NOS: 72
; SEQ ID NO 56
; LENGTH: 242
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
;   NAME/KEY: Artificial Sequence
;   LOCATION: 1-242
; OTHER INFORMATION: recombinant immunoglobulin
US-11-259-232-56

Query Match      68.8%; Score 33; DB 11; Length 242;
Best Local Similarity 85.7%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 CVQSTHV 9
      | | | | |
Db      116 CSQSTHV 122

RESULT 41
US-11-259-232-62
; Sequence 62, Application US/11259232
; Publication No. US20060083683A1
; GENERAL INFORMATION:

```

APPLICANT: Genentech, Inc., Hsai, Vanessa
APPLICANT: Koumenis, Iphigenia
APPLICANT: Leong, Steven R.
APPLICANT: Shatrokh, Zahra
APPLICANT: Zapata, Gerardo A.
FILE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND USES OF SAME
FILE REFERENCE: PI085R6
CURRENT APPLICATION NUMBER: US/11/259,232
CURRENT FILING DATE: 2005-10-25
PRIOR APPLICATION NUMBER: US/09/489,394
PRIOR FILING DATE: 2000-01-21
PRIOR APPLICATION NUMBER: US 60/116,787
PRIOR FILING DATE: 1999-01-21
NUMBER OF SEQ ID NOS: 72
SEQ ID NO 62
LENGTH: 242
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: Artificial Sequence
LOCATION: 1-242
OTHER INFORMATION: recombinant immunoglobulin
US-11-259-232-62

Query Match 68.8%; Score 33; DB 11; Length 242;
Best Local Similarity 85.7%; Pred. No. 26;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
Db 116 CSOSTHV 122

RESULT 42
US-11-239-510-15
Sequence 15, Application US/11239510
Publication No. US20060063715A1
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
Wood, James F.
Hardman, Karl
Bird, Robert
Filpula, David
Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/239,510
FILING DATE: 29-Sep-2005
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/137,297
FILING DATE: 03-May-2002
APPLICATION NUMBER: US/09/443,213
FILING DATE: <Unknown>
APPLICATION NUMBER: US 09/166,094
FILING DATE: 05-OCT-1998
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992

APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000E
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2500
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 250 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-11-239-510-15

Query Match 68.8%; Score 33; DB 11; Length 250;
Best Local Similarity 85.7%; Pred. No. 27;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
Db 93 CSOSTHV 99

RESULT 43
US-11-239-510-17
Sequence 17, Application US/11239510
Publication No. US20060063715A1
GENERAL INFORMATION:
APPLICANT: Whitlow, Marc
Wood, James F.
Hardman, Karl
Bird, Robert
Filpula, David
Rollence, Michelle
TITLE OF INVENTION: Multivalent Antigen-Binding Proteins
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Avenue, NW
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/239,510
FILING DATE: 29-Sep-2005
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/137,297
FILING DATE: 03-May-2002
APPLICATION NUMBER: US/09/443,213
FILING DATE: <Unknown>
APPLICATION NUMBER: US 09/166,094
FILING DATE: 05-OCT-1998
APPLICATION NUMBER: US 08/392,338
FILING DATE: 22-FEB-1995
APPLICATION NUMBER: US 07/989,846
FILING DATE: 20-NOV-1992
APPLICATION NUMBER: US 07/796,936
FILING DATE: 25-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: Goldstein, Jorge A.
REGISTRATION NUMBER: 29,021
REFERENCE/DOCKET NUMBER: 0977.003000E

```
TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 253 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 17:
US-11-239-510-17

Query Match      68.8%; Score 33; DB 11; Length 253;
Best Local Similarity 85.7%; Pred. No. 27;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 CVOSTHV 9
Db 93 CSQSTHV 99

RESULT 44
US-11-096-568A-16988
; Sequence 16988, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Therby
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 16988
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(299)
; OTHER INFORMATION: Ceres Seq. ID no. 12355646
US-11-096-568A-16988

Query Match      68.8%; Score 33; DB 11; Length 299;
Best Local Similarity 62.5%; Pred. No. 32;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCVQSTHV 9
Db 75 LCLQETHL 82

RESULT 45
US-11-096-568A-16987
; Sequence 16987, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Therby
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 16987
; LENGTH: 304
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(304)
; OTHER INFORMATION: Ceres Seq. ID no. 12355645
US-11-096-568A-16987
```

```
Query Match      68.8%; Score 33; DB 11; Length 304;
Best Local Similarity 62.5%; Pred. No. 32;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCVQSTHV 9
Db 80 LCLQETHL 87

RESULT 46
US-10-505-928-79
; Sequence 79, Application US/10505928
; Publication No. US20060088532A1
; GENERAL INFORMATION:
; APPLICANT: Ludwig Institute for Cancer Research et al.
; TITLE OF INVENTION: LYMPHATIC ENDOTHELIAL GENES
; FILE REFERENCE: 28967/39178
; CURRENT APPLICATION NUMBER: US/10/505,928
; CURRENT FILING DATE: 2004-08-27
; PRIOR APPLICATION NUMBER: US 60/363,019
; PRIOR FILING DATE: 2002-03-07
; NUMBER OF SEQ ID NOS: 866
; SOFTWARE: Patentin 3.2
; SEQ ID NO 79
; LENGTH: 306
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-505-928-79

Query Match      68.8%; Score 33; DB 8; Length 306;
Best Local Similarity 55.6%; Pred. No. 32;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 RLQVQSTHV 9
Db 68 RLQVMSHL 76

RESULT 47
US-11-096-568A-16986
; Sequence 16986, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Therby
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 16986
; LENGTH: 323
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(323)
; OTHER INFORMATION: Ceres Seq. ID no. 12355644
US-11-096-568A-16986

Query Match      68.8%; Score 33; DB 11; Length 323;
Best Local Similarity 62.5%; Pred. No. 34;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 LCVQSTHV 9
Db 99 LCLQETHL 106

RESULT 48
US-11-264-096-1917
; Sequence 1917, Application US/11264096
```

```
/ Publication No. US20060084794A1
/ GENERAL INFORMATION:
/ APPLICANT: Rosen et al.
/ TITLE OF INVENTION: Albumin Fusion Proteins
/ FILE REFERENCE: PF546D1
/ CURRENT APPLICATION NUMBER: US/11/264,096
/ PRIOR FILING DATE: 2005-11-02
/ PRIOR APPLICATION NUMBER: 09/833,245
/ PRIOR FILING DATE: 2001-04-12
/ PRIOR APPLICATION NUMBER: 60/229, 358
/ PRIOR FILING DATE: 2000-04-12
/ PRIOR APPLICATION NUMBER: 60/256, 931
/ PRIOR FILING DATE: 2000-12-21
/ PRIOR APPLICATION NUMBER: 60/199, 384
/ PRIOR FILING DATE: 2000-04-25
/ NUMBER OF SEQ ID NOS: 2267
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 1917
/ LENGTH: 331
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: SITE
/ LOCATION: (245)
/ OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
/ FEATURE:
/ NAME/KEY: SITE
/ LOCATION: (257)
/ OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
/ FEATURE:
/ NAME/KEY: SITE
/ LOCATION: (296)
/ OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
/ FEATURE:
/ NAME/KEY: SITE
/ LOCATION: (300)
/ OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
/ FEATURE:
/ NAME/KEY: SITE
/ LOCATION: (301)
/ OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
/ US-11-264-096-1917

Query Match          68.8%; Score 33; DB 11; Length 331;
Best Local Similarity 55.6%; Pred. No. 35;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy      1 RLCVQSTHV 9
|||:|:|:
Db      171 RLCWMSHL 179

RESULT 49
US-10-505-928-31
/ Sequence 31, Application US/10505928
/ Publication No. US20060088532A1
/ GENERAL INFORMATION:
/ APPLICANT: Ludwig Institute for Cancer Research et al.
/ TITLE OF INVENTION: LYMPHATIC ENDOTHELIAL GENES
/ FILE REFERENCE: 28967/39178
/ CURRENT APPLICATION NUMBER: US/10/505,928
/ PRIOR FILING DATE: 2004-08-27
/ PRIOR APPLICATION NUMBER: US 60/363,019
/ PRIOR FILING DATE: 2002-03-07
/ NUMBER OF SEQ ID NOS: 866
/ SOFTWARE: PatentIn 3.2
/ SEQ ID NO 31
/ LENGTH: 409
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ US-10-505-928-31

Query Match          68.8%; Score 33; DB 8; Length 409;
```

```
Best Local Similarity 55.6%; Pred. No. 42;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy      1 RLCVQSTHV 9
|||:|:|:
Db      171 RLCWMSHL 179

RESULT 50
US-11-264-096-1503
/ Sequence 1503, Application US/11264096
/ Publication No. US20060084794A1
/ GENERAL INFORMATION:
/ APPLICANT: Rosen et al.
/ TITLE OF INVENTION: Albumin Fusion Proteins
/ FILE REFERENCE: PF546D1
/ CURRENT APPLICATION NUMBER: US/11/264,096
/ PRIOR FILING DATE: 2005-11-02
/ PRIOR APPLICATION NUMBER: 09/833,245
/ PRIOR FILING DATE: 2001-04-12
/ PRIOR APPLICATION NUMBER: 60/229, 358
/ PRIOR FILING DATE: 2000-04-12
/ PRIOR APPLICATION NUMBER: 60/256, 931
/ PRIOR FILING DATE: 2000-12-21
/ PRIOR APPLICATION NUMBER: 60/199, 384
/ PRIOR FILING DATE: 2000-04-25
/ NUMBER OF SEQ ID NOS: 2267
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 1503
/ LENGTH: 409
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ US-11-264-096-1503

Query Match          68.8%; Score 33; DB 11; Length 409;
Best Local Similarity 55.6%; Pred. No. 42;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy      1 RLCVQSTHV 9
|||:|:|:
Db      171 RLCWMSHL 179

Search completed: May 5, 2006, 08:18:47
Job time : 9.4 secs
```

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 06:24:27 ; Search time 26.75 Seconds
(without alignments)
27.816 Million cell updates/sec

Title: US-08-170-344-17

Perfect score: 44

Sequence: 1 TLEDLMGT 9

Scoring table: BLOSUM62

Gapop 10.0, Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database:

Issued.Patents.AA:*
1: /cgn2_6/ptodata/1/1aa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/6_COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/H_COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/PTGUS_COMB.pep:*
5: /cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
6: /cgn2_6/ptodata/1/1aa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	44	100.0	9	2	US-10-365-908-6
2	44	100.0	10	2	US-10-365-908-18
3	44	100.0	10	2	US-10-365-908-42
4	44	100.0	20	2	US-08-075-541D-49
5	44	100.0	20	2	US-08-075-541D-50
6	44	100.0	20	2	US-09-980-177A-75
7	44	100.0	21	1	US-08-934-915-50
8	44	100.0	21	2	US-09-980-177A-76
9	44	100.0	26	2	US-08-075-541D-40
10	44	100.0	28	2	US-09-486-394-5
11	44	100.0	30	1	US-08-934-915-53
12	44	100.0	30	1	US-08-934-915-54
13	44	100.0	30	1	US-08-934-915-54
14	44	100.0	30	1	US-08-934-915-54
15	44	100.0	30	1	US-08-934-915-54
16	44	100.0	30	1	US-08-934-915-54
17	44	100.0	30	1	US-08-934-915-54
18	44	100.0	30	1	US-08-934-915-54
19	44	100.0	30	1	US-08-934-915-54
20	44	100.0	30	1	US-08-934-915-54
21	44	100.0	30	1	US-08-934-915-54
22	44	100.0	30	1	US-08-934-915-54
23	44	100.0	30	1	US-08-934-915-54
24	44	100.0	30	1	US-08-934-915-54
25	44	100.0	30	1	US-08-934-915-54
26	44	100.0	30	1	US-08-934-915-54
27	44	100.0	30	1	US-08-934-915-54

28	44	100.0	98	2	US-09-980-523A-12	Sequence 12, Appl
29	44	100.0	121	2	US-09-613-303-12	Sequence 12, Appl
30	44	100.0	121	2	US-10-267-311-12	Sequence 12, Appl
31	44	100.0	172	2	US-08-860-165-14	Sequence 14, Appl
32	44	100.0	172	2	US-09-359-382-14	Sequence 14, Appl
33	44	100.0	185	2	US-09-462-993-2	Sequence 2, Appl
34	44	100.0	198	2	US-09-613-303-35	Sequence 35, Appl
35	44	100.0	198	2	US-10-267-311-35	Sequence 35, Appl
36	44	100.0	220	2	US-09-485-885-1	Sequence 1, Appl
37	44	100.0	220	2	US-09-485-885-8	Sequence 8, Appl
38	44	100.0	239	2	US-09-485-885-12	Sequence 12, Appl
39	44	100.0	253	1	US-08-459-818-20	Sequence 20, Appl
40	44	100.0	253	1	US-08-889-666-20	Sequence 20, Appl
41	44	100.0	253	1	US-08-465-078-20	Sequence 20, Appl
42	44	100.0	253	1	US-08-725-776-20	Sequence 20, Appl
43	44	100.0	253	1	US-08-488-062-20	Sequence 20, Appl
44	44	100.0	263	1	US-08-117-083-9	Sequence 9, Appl
45	44	100.0	266	2	US-08-860-165-10	Sequence 10, Appl
46	44	100.0	266	2	US-09-359-382-10	Sequence 10, Appl
47	44	100.0	266	2	US-09-367-309A-1	Sequence 1, Appl
48	44	100.0	287	2	US-09-501-097A-25	Sequence 25, Appl
49	44	100.0	295	2	US-09-613-303-33	Sequence 33, Appl
50	44	100.0	295	2	US-10-267-311-33	Sequence 33, Appl
51	44	100.0	324	2	US-09-613-303-25	Sequence 25, Appl
52	44	100.0	324	2	US-10-267-311-25	Sequence 25, Appl
53	44	100.0	371	2	US-09-485-885-6	Sequence 6, Appl
54	44	100.0	371	2	US-09-485-885-14	Sequence 14, Appl
55	44	100.0	420	2	US-09-501-097A-22	Sequence 22, Appl
56	44	100.0	493	2	US-09-613-303-19	Sequence 19, Appl
57	44	100.0	493	2	US-10-267-311-19	Sequence 19, Appl
58	44	100.0	639	2	US-09-613-303-17	Sequence 17, Appl
59	44	100.0	639	2	US-10-267-311-17	Sequence 17, Appl
60	44	100.0	641	2	US-09-613-303-51	Sequence 51, Appl
61	44	100.0	641	2	US-10-267-311-51	Sequence 51, Appl
62	44	100.0	647	2	US-09-613-303-53	Sequence 53, Appl
63	44	100.0	647	2	US-10-267-311-53	Sequence 53, Appl
64	44	100.0	648	2	US-09-613-303-29	Sequence 29, Appl
65	44	100.0	648	2	US-10-267-311-29	Sequence 29, Appl
66	44	100.0	711	2	US-09-613-303-41	Sequence 41, Appl
67	44	100.0	711	2	US-10-267-311-41	Sequence 41, Appl
68	44	100.0	723	2	US-09-501-097A-20	Sequence 20, Appl
69	44	100.0	724	2	US-09-613-303-45	Sequence 45, Appl
70	44	100.0	724	2	US-10-267-311-45	Sequence 45, Appl
71	39	88.6	9	2	US-10-365-908-22	Sequence 22, Appl
72	72	88.6	19	2	US-09-980-523A-18	Sequence 18, Appl
73	39	88.6	21	1	US-08-934-915-157	Sequence 157, Appl
74	35	79.5	10	2	US-10-365-908-38	Sequence 38, Appl
75	34	77.3	96	2	US-08-858-207A-303	Sequence 303, Appl
76	34	77.3	106	2	US-09-583-110-3873	Sequence 3873, Appl
77	34	77.3	110	2	US-09-107-433-3226	Sequence 3226, Appl
78	34	77.3	127	2	US-09-583-110-5107	Sequence 5107, Appl
79	34	77.3	132	2	US-09-583-110-4623	Sequence 4623, Appl
80	34	77.3	132	2	US-09-107-433-2761	Sequence 2761, Appl
81	34	77.3	133	2	US-09-583-110-5149	Sequence 5149, Appl
82	34	77.3	135	2	US-09-107-433-1643	Sequence 1643, Appl
83	34	77.3	167	2	US-09-107-433-2919	Sequence 2919, Appl
84	34	77.3	180	2	US-09-583-110-3770	Sequence 3770, Appl
85	34	77.3	191	2	US-09-583-110-4265	Sequence 4265, Appl
86	34	77.3	191	2	US-09-107-433-3219	Sequence 3219, Appl
87	34	77.3	194	2	US-09-107-433-3611	Sequence 3611, Appl
88	34	77.3	11	2	US-10-365-908-33	Sequence 33, Appl
89	33.5	75.0	9	2	US-10-365-908-109	Sequence 109, Appl
90	33	75.0	9	2	US-10-365-908-120	Sequence 120, Appl
91	33	75.0	10	2	US-10-365-908-137	Sequence 137, Appl
92	33	75.0	11	2	US-10-365-908-134	Sequence 134, Appl
93	33	75.0	30	1	US-08-934-915-15	Sequence 15, Appl
94	33	75.0	30	1	US-08-934-915-76	Sequence 76, Appl
95	33	75.0	103	2	US-09-605-703B-556	Sequence 556, Appl
96	33	75.0	103	2	US-09-605-703B-558	Sequence 558, Appl
97	33	75.0	15	2	US-09-069-827A-144	Sequence 144, Appl
98	32	72.7	172	2	US-09-079-030-117	Sequence 117, Appl
99	32	72.7	343	1	US-08-336-891-2	Sequence 2, Appl
100	32	72.7				

101	32	72.7	343	4	PCT-US95-13795-4	Sequence 4, App11	174	65.9	375	2	US-09-409-938-6	Sequence 6, App11
102	32	72.7	483	2	US-09-049-6728-5	Sequence 5, App11	175	65.9	381	2	US-09-252-991A-25170	Sequence 25170, A
103	32	72.7	487	2	US-09-800-729-145	Sequence 145, App	176	65.9	393	2	US-09-248-796A-22604	Sequence 22604, A
104	32	72.7	491	2	US-10-104-047-3243	Sequence 3243, Ap	177	65.9	403	2	US-09-409-938-4	Sequence 4, App11
105	32	72.7	494	2	US-09-800-729-216	Sequence 216, App	178	65.9	404	2	US-09-543-681A-4348	Sequence 4348, Ap
106	32	72.7	496	2	US-10-104-047-3006	Sequence 3006, Ap	179	65.9	404	2	US-09-489-030A-12611	Sequence 12611, A
107	32	72.7	497	2	US-10-104-047-3773	Sequence 3773, Ap	180	65.9	423	2	US-09-252-991A-29094	Sequence 29094, A
108	32	72.7	499	2	US-09-049-6728-1	Sequence 1, App11	181	65.9	434	2	US-09-409-938-2	Sequence 2, App11
109	32	72.7	508	2	US-10-104-047-3233	Sequence 3233, Ap	182	65.9	438	2	US-09-830-230A-18	Sequence 18, App1
110	32	72.7	530	2	US-09-800-729-112	Sequence 112, App	183	65.9	447	1	US-08-844-010-2	Sequence 2, App11
111	32	72.7	543	2	US-09-413-814-91	Sequence 91, App1	184	65.9	447	2	US-09-012-873-2	Sequence 2, App11
112	32	72.7	544	2	US-09-413-814-81	Sequence 81, App1	185	65.9	448	2	US-09-583-110-29228	Sequence 29228, Ap
113	32	72.7	544	2	US-08-131-3658-54	Sequence 54, App1	186	65.9	447	2	US-09-107-433-3371	Sequence 3371, Ap
114	32	72.7	1141	1	US-08-668-123-54	Sequence 54, App1	187	65.9	460	2	US-09-489-030A-12680	Sequence 12680, A
115	31	70.5	300	2	US-09-982-616-9	Sequence 9, App11	188	65.9	463	2	US-09-538-092-162	Sequence 162, App
116	31	70.5	377	2	US-09-248-796A-18772	Sequence 18772, A	189	65.9	463	2	US-09-830-230A-17	Sequence 17, App1
117	31	70.5	452	2	US-09-252-991A-23336	Sequence 23336, A	190	65.9	744	1	US-08-178-477B-2	Sequence 2, App11
118	31	70.5	547	2	US-09-949-016-8330	Sequence 8330, Ap	191	65.9	744	2	US-10-101-464A-942	Sequence 942, App
119	31	70.5	760	1	US-08-619-280A-2	Sequence 2, App11	192	65.9	785	2	US-09-710-279-264	Sequence 264, App
120	31	70.5	760	1	US-08-619-280A-2	Sequence 2, App11	193	65.9	818	2	US-09-248-796A-20792	Sequence 20792, A
121	31	70.5	760	1	US-08-619-280A-2	Sequence 2, App11	194	65.9	902	2	US-09-134-001C-5157	Sequence 5157, Ap
122	31	70.5	760	1	US-08-619-280A-2	Sequence 2, App11	195	65.9	902	2	US-09-134-001C-5157	Sequence 5157, Ap
123	31	70.5	760	1	US-08-619-280A-2	Sequence 2, App11	196	65.9	902	2	US-09-134-001C-5157	Sequence 5157, Ap
124	30	68.2	10	2	US-10-365-908-47	Sequence 2, App11	197	65.9	902	2	US-09-134-001C-5157	Sequence 5157, Ap
125	30	68.2	116	2	US-08-311-731A-27	Sequence 27, App1	198	65.9	10	2	US-10-365-908-37	Sequence 37, App1
126	30	68.2	239	2	US-09-949-016-7556	Sequence 7556, Ap	199	65.9	10	2	US-10-365-908-37	Sequence 37, App1
127	30	68.2	245	2	US-09-489-039A-14192	Sequence 14192, A	200	65.9	47	2	US-09-079-030-134	Sequence 134, App
128	30	68.2	246	2	US-09-532-856-4	Sequence 4, App11	201	65.9	57	2	US-09-902-540-10995	Sequence 10995, A
129	30	68.2	246	2	US-09-524-100C-4	Sequence 4, App11	202	65.9	64	2	US-09-583-110-3748	Sequence 3748, Ap
130	30	68.2	246	2	US-10-212-507-4	Sequence 225, App	203	65.9	68	2	US-09-543-681A-7888	Sequence 7888, Ap
131	30	68.2	246	2	US-09-991-181-225	Sequence 225, App	204	65.9	76	2	US-09-107-433-3856	Sequence 3856, Ap
132	30	68.2	246	2	US-09-990-444-225	Sequence 225, App	205	65.9	107	2	US-09-079-030-110	Sequence 130, App
133	30	68.2	246	2	US-09-997-533-225	Sequence 225, App	206	65.9	135	2	US-09-079-030-110	Sequence 126, App
134	30	68.2	246	2	US-09-992-598-225	Sequence 225, App	207	65.9	147	2	US-09-270-767-42776	Sequence 42776, A
135	30	68.2	254	2	US-09-252-991A-32919	Sequence 32919, A	208	65.9	172	2	US-09-270-767-37623	Sequence 37623, A
136	30	68.2	255	2	US-09-902-540-15986	Sequence 15986, A	209	65.9	172	2	US-09-270-767-52840	Sequence 52840, A
137	30	68.2	274	2	US-09-532-856-8	Sequence 8, App11	210	65.9	172	2	US-09-079-030-1118	Sequence 118, App
138	30	68.2	274	2	US-09-524-100C-8	Sequence 8, App11	211	65.9	174	2	US-09-079-030-116	Sequence 116, App
139	30	68.2	274	2	US-10-212-507-8	Sequence 8, App11	212	65.9	179	2	US-09-178-978B-16	Sequence 16, App1
140	30	68.2	411	2	US-09-540-236-2551	Sequence 14268, A	213	65.9	179	2	US-09-178-978B-16	Sequence 16, App1
141	30	68.2	453	2	US-09-532-856-6	Sequence 2551, Ap	214	65.9	227	2	US-10-090-365-41	Sequence 41, App1
142	30	68.2	453	2	US-09-524-100C-6	Sequence 6, App11	215	65.9	227	2	US-09-248-796A-21586	Sequence 21586, A
143	30	68.2	453	2	US-10-212-507-6	Sequence 6, App11	216	65.9	230	2	US-09-107-533A-6758	Sequence 6758, Ap
144	30	68.2	453	2	US-09-674-8268-4	Sequence 4, App11	217	65.9	243	2	US-09-439-813-2	Sequence 2, App11
145	30	68.2	562	2	US-09-583-110-3637	Sequence 3637, Ap	218	65.9	256	2	US-09-139-600-50	Sequence 29843, A
146	30	68.2	1225	2	US-09-107-433-4267	Sequence 4267, Ap	219	65.9	260	2	US-09-139-600-50	Sequence 4449, Ap
147	30	68.2	1562	2	US-09-320-878-3	Sequence 3, App11	220	65.9	260	2	US-09-139-600-50	Sequence 55, App1
148	30	68.2	1562	2	US-09-105-537-35	Sequence 35, App1	221	65.9	260	2	US-09-139-600-50	Sequence 55, App1
149	30	68.2	1562	2	US-09-141-808-4	Sequence 4, App11	222	65.9	261	2	US-09-252-991A-29069	Sequence 29069, A
150	30	68.2	1562	2	US-09-657-440-3	Sequence 3, App11	223	65.9	261	2	US-09-079-030-120	Sequence 120, App
151	30	68.2	1562	2	US-09-793-708-3	Sequence 3, App11	224	65.9	277	2	US-09-852-991A-18539	Sequence 18539, A
152	30	68.2	2662	2	US-09-595-684B-31	Sequence 31, App1	225	65.9	316	2	US-09-248-796A-16974	Sequence 16974, A
153	30	68.2	2663	2	US-09-538-092-1252	Sequence 1252, Ap	226	65.9	361	2	US-09-543-681A-5180	Sequence 5180, Ap
154	30	68.2	11877	2	US-10-365-908-131	Sequence 131, App	227	65.9	379	2	US-09-107-533A-5334	Sequence 5334, Ap
155	29	65.9	10	2	US-08-664-357F-2	Sequence 10, App1	228	65.9	384	2	US-09-731-030A-11	Sequence 11, App1
156	29	65.9	138	2	US-09-252-991A-18056	Sequence 18056, A	229	65.9	384	2	US-09-731-030A-11	Sequence 11, App1
157	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	230	65.9	412	2	US-09-888-242-28	Sequence 28, App1
158	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	231	65.9	412	2	US-09-888-242-28	Sequence 28, App1
159	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	232	65.9	412	2	US-09-888-242-28	Sequence 28, App1
160	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	233	65.9	412	2	US-09-888-242-28	Sequence 28, App1
161	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	234	65.9	412	2	US-09-888-242-28	Sequence 28, App1
162	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	235	65.9	412	2	US-09-888-242-28	Sequence 28, App1
163	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	236	65.9	412	2	US-09-888-242-28	Sequence 28, App1
164	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	237	65.9	412	2	US-09-888-242-28	Sequence 28, App1
165	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	238	65.9	412	2	US-09-888-242-28	Sequence 28, App1
166	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	239	65.9	412	2	US-09-888-242-28	Sequence 28, App1
167	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	240	65.9	412	2	US-09-888-242-28	Sequence 28, App1
168	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	241	65.9	412	2	US-09-888-242-28	Sequence 28, App1
169	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	242	65.9	412	2	US-09-888-242-28	Sequence 28, App1
170	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	243	65.9	412	2	US-09-888-242-28	Sequence 28, App1
171	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	244	65.9	412	2	US-09-888-242-28	Sequence 28, App1
172	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	245	65.9	412	2	US-09-888-242-28	Sequence 28, App1
173	29	65.9	138	2	US-09-107-532A-6780	Sequence 6780, Ap	246	65.9	412	2	US-09-888-242-28	Sequence 28, App1

247	28	63.6	522	2	US-10-012-542-220	Sequence 220, App	320	27	61.4	195	2	US-09-270-767-45492	Sequence 45492, A
248	28	63.6	522	2	US-10-115-123-220	Sequence 220, App	321	27	61.4	197	2	US-09-336-643A-16	Sequence 16, Appl
249	28	63.6	545	2	US-09-066-046-39	Sequence 39, Appl	322	27	61.4	207	2	US-09-489-039A-11472	Sequence 11472, A
250	28	63.6	546	2	US-09-252-991A-19122	Sequence 19122, A	323	27	61.4	207	2	US-09-809-665A-165	Sequence 165, App
251	28	63.6	555	2	US-09-461-325-251	Sequence 251, App	324	27	61.4	212	2	US-09-599-368A-94	Sequence 94, Appl
252	28	63.6	555	2	US-10-012-542-251	Sequence 251, App	325	27	61.4	216	2	US-09-489-039A-1602	Sequence 1602, A
253	28	63.6	555	2	US-10-115-123-251	Sequence 251, App	326	27	61.4	222	2	US-09-902-540-15120	Sequence 15120, A
254	28	63.6	574	2	US-09-991-181-340	Sequence 340, App	327	27	61.4	224	2	US-09-902-540-15120	Sequence 44834, A
255	28	63.6	574	2	US-09-990-444-340	Sequence 340, App	328	27	61.4	226	2	US-09-489-039A-11115	Sequence 12115, A
256	28	63.6	574	2	US-09-997-333-340	Sequence 340, App	329	27	61.4	230	2	US-09-134-001C-4399	Sequence 4399, App
257	28	63.6	574	2	US-09-992-598-340	Sequence 340, App	330	27	61.4	250	2	US-09-902-540-12400	Sequence 12400, App
258	28	63.6	580	2	US-09-188-930-307	Sequence 307, App	331	27	61.4	255	2	US-09-107-532A-4920	Sequence 4920, App
259	28	63.6	580	2	US-09-312-283C-307	Sequence 307, App	332	27	61.4	257	2	US-09-949-016-6654	Sequence 6654, App
260	28	63.6	597	2	US-09-902-540-14203	Sequence 14203, A	333	27	61.4	259	2	US-09-134-000C-3868	Sequence 3868, App
261	28	63.6	625	1	US-08-365-981-14	Sequence 14, Appl	334	27	61.4	263	2	US-09-949-016-7794	Sequence 7794, App
262	28	63.6	631	2	US-09-252-991A-26007	Sequence 26007, A	335	27	61.4	273	2	US-09-438-185A-239	Sequence 239, App
263	28	63.6	687	2	US-09-338-352-5840	Sequence 5840, App	336	27	61.4	280	2	US-09-438-185A-239	Sequence 4384, A
264	28	63.6	759	2	US-09-252-991A-33071	Sequence 33071, A	337	27	61.4	282	2	US-09-252-991A-31742	Sequence 31742, A
265	28	63.6	763	2	US-08-961-083-66	Sequence 66, Appl	338	27	61.4	282	2	US-09-982-616-8	Sequence 616, A
266	28	63.6	763	2	US-09-536-784-66	Sequence 66, Appl	339	27	61.4	308	2	US-09-198-452A-310	Sequence 310, App
267	28	63.6	763	2	US-09-765-271-66	Sequence 66, Appl	340	27	61.4	311	2	US-09-447-006-4	Sequence 4, Appl
268	28	63.6	763	2	US-09-765-272A-66	Sequence 66, Appl	341	27	61.4	311	2	US-09-447-006-4	Sequence 2, Appl
269	28	63.6	819	2	US-09-468-656A-10	Sequence 10, Appl	342	27	61.4	317	2	US-09-107-532A-7154	Sequence 7154, App
270	28	63.6	826	2	US-09-769-787-194	Sequence 194, App	343	27	61.4	317	2	US-09-438-185A-239	Sequence 239, App
271	28	63.6	830	2	US-09-107-433-1309	Sequence 4309, App	344	27	61.4	325	2	US-09-215-569B-4	Sequence 4, Appl
272	28	63.6	838	2	US-09-252-991A-25809	Sequence 25809, A	345	27	61.4	325	2	US-09-605-703B-138	Sequence 138, App
273	28	63.6	845	2	US-09-468-656A-4	Sequence 4, Appl	346	27	61.4	330	2	US-09-949-016-9130	Sequence 9130, App
274	28	63.6	845	2	US-09-538-092-932	Sequence 932, App	347	27	61.4	332	2	US-09-902-540-14394	Sequence 14394, A
275	28	63.6	851	2	US-09-583-110-1850	Sequence 3850, App	348	27	61.4	332	2	US-09-902-540-14394	Sequence 1212, A
276	28	63.6	860	2	US-09-949-016-7553	Sequence 7553, App	349	27	61.4	332	2	US-09-902-540-14394	Sequence 1212, A
277	28	63.6	879	2	US-09-252-991A-22604	Sequence 22604, A	350	27	61.4	332	2	US-09-180-109A-2	Sequence 2, Appl
278	28	63.6	978	2	US-09-198-452A-1055	Sequence 1055, App	351	27	61.4	332	2	US-09-180-109A-6	Sequence 6, Appl
279	28	63.6	978	2	US-09-438-185A-982	Sequence 982, App	352	27	61.4	332	2	US-09-459-133-13	Sequence 13, Appl
280	28	63.6	1088	2	US-09-328-352-5723	Sequence 5723, App	353	27	61.4	337	1	US-08-868-288A-5	Sequence 5, Appl
281	28	63.6	1127	2	US-09-902-540-11084	Sequence 11084, A	354	27	61.4	337	1	US-09-235-773-5	Sequence 5, Appl
282	28	63.6	1147	1	US-08-131-355B-38	Sequence 38, Appl	355	27	61.4	337	2	US-09-388-993-5	Sequence 18, App
283	28	63.6	1147	1	US-08-668-133-38	Sequence 38, Appl	356	27	61.4	337	2	US-09-919-039-178	Sequence 1052, App
284	28	63.6	1164	1	US-09-949-016-9845	Sequence 9845, App	357	27	61.4	337	2	US-09-501-714-5	Sequence 5, Appl
285	28	63.6	1179	2	US-09-949-016-7088	Sequence 7088, App	358	27	61.4	337	2	US-09-620-405B-495	Sequence 495, App
286	28	63.6	1251	2	US-09-252-991A-17263	Sequence 17263, A	359	27	61.4	397	2	US-08-423-752-2	Sequence 423, App
287	28	63.6	1358	1	US-08-404-665-4	Sequence 4, Appl	360	27	61.4	410	2	US-08-423-752-4	Sequence 4, Appl
288	28	63.6	1358	1	US-08-404-671-4	Sequence 4, Appl	361	27	61.4	410	2	US-08-423-752-4	Sequence 7, Appl
289	28	63.6	1358	1	US-08-404-781-4	Sequence 4, Appl	362	27	61.4	410	2	US-08-423-752-4	Sequence 16, Appl
290	28	63.6	1358	1	US-09-949-002-353	Sequence 353, App	363	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
291	28	63.6	1385	2	US-09-949-002-431	Sequence 431, App	364	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
292	28	63.6	1385	2	US-09-902-540-15506	Sequence 15506, A	365	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
293	28	63.6	3852	2	US-10-025-225-4	Sequence 4, Appl	366	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
294	28	63.6	4585	2	US-10-025-225-6	Sequence 6, Appl	367	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
295	28	63.6	4588	2	US-10-025-225-8	Sequence 8, Appl	368	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
296	28	63.6	4589	2	US-10-025-225-2	Sequence 2, Appl	369	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
297	27.5	62.5	82	2	US-09-270-767-45813	Sequence 45813, A	370	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
298	27.5	62.5	405	2	US-09-270-767-44068	Sequence 44068, A	371	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
299	27	61.4	21	6	5196511-11	Parent No. 5196511	372	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
300	27	61.4	23	2	US-09-581-094-7	Sequence 7, Appl	373	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
301	27	61.4	77	2	US-09-248-796A-27236	Sequence 27236, A	374	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
302	27	61.4	102	2	US-09-513-999C-6830	Sequence 6830, App	375	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
303	27	61.4	103	2	US-08-180-371-12	Sequence 12, Appl	376	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
304	27	61.4	108	2	US-09-187-859-40	Sequence 40, Appl	377	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
305	27	61.4	108	2	US-09-839-542B-40	Sequence 40, Appl	378	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
306	27	61.4	108	2	US-09-535-852-40	Sequence 40, Appl	379	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
307	27	61.4	108	2	US-10-006-869-40	Sequence 40, Appl	380	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
308	27	61.4	113	2	US-09-248-796A-16255	Sequence 16255, A	381	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
309	27	61.4	118	2	US-09-252-991A-23679	Sequence 23679, A	382	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
310	27	61.4	127	2	US-09-370-838-199	Sequence 199, App	383	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
311	27	61.4	127	2	US-09-854-133-199	Sequence 199, App	384	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
312	27	61.4	137	2	US-09-902-540-16133	Sequence 16133, A	385	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
313	27	61.4	158	2	US-09-902-540-16114	Sequence 16114, A	386	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
314	27	61.4	164	2	US-09-270-767-44090	Sequence 44090, A	387	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
315	27	61.4	179	2	US-09-178-973B-15	Sequence 15, Appl	388	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
316	27	61.4	179	2	US-09-419-568F-27	Sequence 27, Appl	389	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
317	27	61.4	179	2	US-09-354-243B-27	Sequence 27, Appl	390	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
318	27	61.4	179	2	US-09-902-540-11311	Sequence 11311, A	391	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl
319	27	61.4	180	2	US-10-084-298-4	Sequence 4, Appl	392	27	61.4	410	2	US-08-423-752-4	Sequence 18, Appl

393	27	61.4	444	2	US-09-950-022A-8	Sequence 8, Appl1	466	60.2	261	2	US-09-638-695-2	Sequence 2, Appl1	
394	27	61.4	464	2	US-09-950-022A-10	Sequence 10, Appl	467	26.5	354	2	US-09-605-703B-470	Sequence 470, App	
395	27	61.4	478	2	US-09-769-787-55	Sequence 55, Appl	468	60.2	14	1	US-07-807-5229A-33	Sequence 33, Appl	
396	27	61.4	492	2	US-09-583-110-4046	Sequence 4046, Ap	469	26	59.1	14	2	US-08-300-928C-82	Sequence 82, Appl
397	27	61.4	498	1	US-08-357-589-9	Sequence 9, Appl1	470	26	59.1	14	2	US-08-430-944D-82	Sequence 82, Appl
398	27	61.4	488	1	US-09-003-298-9	Sequence 9, Appl1	471	26	59.1	14	2	US-08-430-014-82	Sequence 82, Appl
399	27	61.4	488	2	US-09-252-991A-20702	Sequence 20702, A	472	26	59.1	14	2	US-08-431-184-82	Sequence 82, Appl
400	27	61.4	498	4	PCT-US95-16435-9	Sequence 9, Appl1	473	26	59.1	14	2	US-09-142-885C-22	Sequence 22, Appl
401	27	61.4	507	2	US-09-902-540-16798	Sequence 16798, A	474	26	59.1	19	1	US-07-807-5229A-11	Sequence 11, Appl
402	27	61.4	510	1	US-09-021-923-1	Sequence 1, Appl1	475	26	59.1	19	2	US-08-300-928C-21	Sequence 21, Appl
403	27	61.4	510	2	US-09-107-433-3148	Sequence 3148, Ap	476	26	59.1	19	2	US-08-430-944D-21	Sequence 21, Appl
404	27	61.4	510	2	US-09-991-181-67	Sequence 67, Appl	477	26	59.1	19	2	US-08-430-014-21	Sequence 21, Appl
405	27	61.4	510	2	US-09-980-444-67	Sequence 67, Appl	478	26	59.1	19	2	US-08-431-184-21	Sequence 21, Appl
406	27	61.4	510	2	US-09-700-769-10	Sequence 10, Appl	479	26	59.1	19	4	PCT-US93-02462-11	Sequence 11, Appl
407	27	61.4	510	2	US-09-997-333-67	Sequence 67, Appl	480	26	59.1	23	1	US-08-086-428B-155	Sequence 155, App
408	27	61.4	510	2	US-09-992-598-67	Sequence 67, Appl	481	26	59.1	23	1	US-08-468-570-155	Sequence 155, App
409	27	61.4	512	2	US-09-902-540-13924	Sequence 13924, A	482	26	59.1	23	2	US-08-290-665A-259	Sequence 259, App
410	27	61.4	513	2	US-08-924-183-8	Sequence 8, Appl1	483	26	59.1	23	2	US-08-466-603A-155	Sequence 155, App
411	27	61.4	513	2	US-09-488-364-8	Sequence 8, Appl1	484	26	59.1	23	2	US-09-581-094-8	Sequence 8, Appl1
412	27	61.4	524	2	US-09-710-279-3090	Sequence 3090, Ap	485	26	59.1	23	4	PCT-US95-10388-259	Sequence 259, App
413	27	61.4	534	2	US-09-134-000C-5087	Sequence 5087, Ap	486	26	59.1	29	2	US-07-681-701-9	Sequence 9, Appl1
414	27	61.4	534	2	US-09-710-279-920	Sequence 920, App	487	26	59.1	29	2	US-09-962-756-1406	Sequence 1406, Ap
415	27	61.4	551	2	US-09-902-540-16701	Sequence 16701, A	488	26	59.1	30	2	US-08-777-708C-2	Sequence 2, Appl1
416	27	61.4	553	2	US-09-248-796A-19257	Sequence 19257, A	489	26	59.1	44	1	US-08-262-037-132	Sequence 132, App
417	27	61.4	554	2	US-08-180-371-2	Sequence 2, Appl1	490	26	59.1	60	2	US-08-777-708C-23	Sequence 23, Appl
418	27	61.4	554	4	PCT-US92-05707-2	Sequence 2, Appl1	491	26	59.1	77	2	US-09-134-001C-4035	Sequence 4035, Ap
419	27	61.4	558	2	US-09-489-039A-8857	Sequence 8857, Ap	492	26	59.1	83	2	US-09-543-681A-4559	Sequence 4559, Ap
420	27	61.4	564	2	US-09-710-279-3220	Sequence 3220, Ap	493	26	59.1	90	2	US-08-300-928C-14	Sequence 14, Appl
421	27	61.4	571	2	US-09-902-540-16194	Sequence 16194, A	494	26	59.1	90	2	US-08-430-944D-14	Sequence 14, Appl
422	27	61.4	582	2	US-09-187-999-13	Sequence 13, Appl	495	26	59.1	90	2	US-08-430-014-14	Sequence 14, Appl
423	27	61.4	587	2	US-09-248-796A-15696	Sequence 15696, A	496	26	59.1	90	2	US-08-431-184-14	Sequence 14, Appl
424	27	61.4	592	2	US-09-377-155-17	Sequence 17, Appl	497	26	59.1	91	2	US-09-107-433-4174	Sequence 4174, Ap
425	27	61.4	592	2	US-09-669-974-17	Sequence 17, Appl	498	26	59.1	91	2	US-10-014-269-24	Sequence 24, Appl
426	27	61.4	592	2	US-09-797-862-17	Sequence 17, Appl	499	26	59.1	91	2	US-10-002-974-24	Sequence 24, Appl
427	27	61.4	592	2	US-09-302-626B-110	Sequence 110, App	500	26	59.1	92	2	US-08-300-928C-13	Sequence 13, Appl
428	27	61.4	593	2	US-09-328-352-4463	Sequence 4462, Ap	501	26	59.1	92	2	US-08-430-944D-13	Sequence 13, Appl
429	27	61.4	594	2	US-09-252-991A-28139	Sequence 28139, A	502	26	59.1	92	2	US-08-430-014-13	Sequence 13, Appl
430	27	61.4	595	2	US-09-543-681A-6008	Sequence 6008, Ap	503	26	59.1	92	2	US-08-431-184-13	Sequence 13, Appl
431	27	61.4	625	2	US-09-949-016-11531	Sequence 11531, A	504	26	59.1	92	2	US-09-205-258-890	Sequence 890, Appl
432	27	61.4	629	1	US-08-250-740-33	Sequence 33, Appl	505	26	59.1	92	2	US-09-142-885C-11	Sequence 11, Appl
433	27	61.4	629	1	US-07-695-472B-2	Sequence 2, Appl1	506	26	59.1	92	2	US-10-004-860-890	Sequence 890, App
434	27	61.4	629	2	US-09-106-375-2	Sequence 2, Appl1	507	26	59.1	109	1	US-07-662-193-5	Sequence 5, Appl1
435	27	61.4	629	2	US-09-248-796A-14535	Sequence 14535, A	508	26	59.1	109	1	US-07-807-5229A-6	Sequence 6, Appl1
436	27	61.4	641	1	US-07-718-535-3	Sequence 3, Appl1	509	26	59.1	109	2	US-08-300-928C-8	Sequence 8, Appl1
437	27	61.4	641	1	US-08-161-999-3	Sequence 3, Appl1	510	26	59.1	109	2	US-08-430-944D-8	Sequence 8, Appl1
438	27	61.4	646	2	US-09-949-016-11491	Sequence 11491, A	511	26	59.1	109	2	US-08-430-014-8	Sequence 8, Appl1
439	27	61.4	672	2	US-09-252-991A-17229	Sequence 17229, A	512	26	59.1	109	2	US-08-431-184-8	Sequence 8, Appl1
440	27	61.4	700	2	US-09-543-681A-6902	Sequence 6902, Ap	513	26	59.1	109	2	US-09-270-767-34480	Sequence 34480, A
441	27	61.4	718	2	US-09-107-532A-5234	Sequence 5234, Ap	514	26	59.1	109	2	US-09-270-767-53697	Sequence 53697, A
442	27	61.4	711	2	US-09-462-284-2	Sequence 2, Appl1	515	26	59.1	109	4	PCT-US93-02462-6	Sequence 6, Appl1
443	27	61.4	771	2	US-09-079-592-2	Sequence 2, Appl1	516	26	59.1	111	1	US-07-662-193-4	Sequence 4, Appl1
444	27	61.4	903	2	US-09-902-540-11595	Sequence 11595, A	517	26	59.1	111	2	US-08-300-928C-6	Sequence 6, Appl1
445	27	61.4	909	2	US-09-425-383-2	Sequence 2, Appl1	518	26	59.1	111	2	US-08-430-944D-6	Sequence 6, Appl1
446	27	61.4	935	2	US-09-107-532A-3753	Sequence 3753, Ap	519	26	59.1	111	2	US-08-430-014-6	Sequence 6, Appl1
447	27	61.4	940	2	US-09-198-452A-111	Sequence 111, App	520	26	59.1	111	2	US-08-431-184-6	Sequence 6, Appl1
448	27	61.4	956	2	US-09-438-185A-96	Sequence 96, Appl	521	26	59.1	113	2	US-09-270-767-33854	Sequence 33854, A
449	27	61.4	994	2	US-09-902-540-13622	Sequence 13622, A	522	26	59.1	136	2	US-09-270-767-43071	Sequence 43071, A
450	27	61.4	1004	2	US-09-134-000C-5419	Sequence 5419, Ap	523	26	59.1	139	2	US-09-712-279-2992	Sequence 2992, Ap
451	27	61.4	1023	2	US-09-270-767-43827	Sequence 43827, A	524	26	59.1	140	2	US-09-252-991A-26603	Sequence 26603, Ap
452	27	61.4	1083	2	US-08-895-601-5	Sequence 5, Appl1	525	26	59.1	141	2	US-09-107-532A-727	Sequence 3727, Ap
453	27	61.4	1094	2	US-09-268-347-32	Sequence 32, Appl	526	26	59.1	145	2	US-09-621-976-4902	Sequence 4902, Ap
454	27	61.4	1189	2	US-09-489-039A-13776	Sequence 13776, A	527	26	59.1	149	2	US-08-836-075A-8	Sequence 8, Appl1
455	27	61.4	1273	2	US-09-170-496D-289	Sequence 289, App	528	26	59.1	149	2	US-08-633-886C-80	Sequence 280, App
456	27	61.4	1273	2	US-09-364-425B-54	Sequence 54, Appl	529	26	59.1	149	2	US-08-974-796A-15958	Sequence 15958, A
457	27	61.4	1867	2	US-09-824-574-5	Sequence 5, Appl1	530	26	59.1	152	2	US-09-248-796A-13488	Sequence 13488, A
458	27	61.4	2016	2	US-09-475-252-2	Sequence 2, Appl1	531	26	59.1	153	2	US-09-489-039A-13488	Sequence 13488, A
459	27	61.4	2205	1	US-08-093-453B-2	Sequence 2, Appl1	532	26	59.1	154	2	US-09-328-352-545	Sequence 5245, Ap
460	27	61.4	2636	2	US-09-252-991A-25753	Sequence 25753, A	533	26	59.1	155	2	US-09-270-767-40889	Sequence 40889, A
461	27	61.4	3069	2	US-09-712-363-246	Sequence 246, App	534	26	59.1	155	2	US-09-270-767-56105	Sequence 56105, A
462	27	61.4	3838	2	US-09-949-016-10853	Sequence 10853, A	535	26	59.1	158	2	US-09-605-703B-1462	Sequence 1462, App
463	26.5	60.2	261	2	US-08-815-225-2	Sequence 3, Appl1	536	26	59.1	161	2	US-10-010-464A-766	Sequence 676, App
464	26.5	60.2	261	2	US-08-815-225-3	Sequence 3, Appl1	537	26	59.1	164	2	US-09-540-236-2145	Sequence 2145, Ap
465	26.5	60.2	261	2	US-09-347-878-50	Sequence 50, Appl	538	26	59.1	166	1	US-08-483-695-32	Sequence 32, Appl

539	26	59.1	166	1	US-07-965-285-32	Sequence 32, Appl	612	26	59.1	345	2	US-09-265-686-2	Sequence 2, Appl
540	26	59.1	166	1	US-08-487-231-32	Sequence 32, Appl	613	26	59.1	345	2	US-09-540-224-5	Sequence 5, Appl
541	26	59.1	166	2	US-09-201-912-32	Sequence 32, Appl	614	26	59.1	345	2	US-09-564-595D-33	Sequence 33, Appl
542	26	59.1	169	2	US-09-134-001C-4614	Sequence 4614, Ap	615	26	59.1	345	2	US-09-706-968-2	Sequence 2, Appl
543	26	59.1	185	2	US-09-722-210-536	Sequence 536, App	616	26	59.1	345	2	US-09-723-749-2	Sequence 2, Appl
544	26	59.1	185	2	US-09-902-540-14654	Sequence 14654, A	617	26	59.1	345	2	US-09-823-033-2	Sequence 2, Appl
545	26	59.1	180	1	US-07-681-701-17	Sequence 17, Appl	618	26	59.1	345	2	US-09-468-6477-2	Sequence 2, Appl
546	26	59.1	192	1	US-08-086-4288-93	Sequence 93, Appl	619	26	59.1	345	2	US-09-468-6477-101	Sequence 101, App
547	26	59.1	192	1	US-08-086-4288-94	Sequence 94, Appl	620	26	59.1	345	2	US-09-468-6477-110	Sequence 110, App
548	26	59.1	192	1	US-08-468-570-93	Sequence 93, Appl	621	26	59.1	345	2	US-09-468-6477-110	Sequence 110, App
549	26	59.1	192	1	US-08-468-570-94	Sequence 94, Appl	622	26	59.1	345	2	US-09-468-6477-110	Sequence 110, App
550	26	59.1	192	1	US-08-230-665A-93	Sequence 93, Appl	623	26	59.1	345	2	US-10-139-583-2	Sequence 2, Appl
551	26	59.1	192	1	US-08-230-665A-94	Sequence 94, Appl	624	26	59.1	345	2	US-10-226-559-5	Sequence 5, Appl
552	26	59.1	192	2	US-08-466-601A-93	Sequence 93, Appl	625	26	59.1	345	2	US-09-541-752-2	Sequence 2, Appl
553	26	59.1	192	2	US-08-466-601A-94	Sequence 94, Appl	626	26	59.1	345	2	US-09-541-752-2	Sequence 2, Appl
554	26	59.1	192	4	PCT-US95-10398-93	Sequence 93, Appl	627	26	59.1	345	2	US-09-999-833A-488	Sequence 488, App
555	26	59.1	192	4	PCT-US95-10398-94	Sequence 94, Appl	628	26	59.1	345	2	US-10-020-445A-488	Sequence 488, App
556	26	59.1	197	6	5198347-2	Patent No. 5198347	629	26	59.1	345	2	US-09-876-813A-33	Sequence 33, Appl
557	26	59.1	202	2	US-09-902-540-15713	Sequence 15713, A	630	26	59.1	345	2	US-09-134-001C-4004	Sequence 4004, Ap
558	26	59.1	210	2	US-09-605-703B-1460	Sequence 1460, Ap	631	26	59.1	345	2	US-09-468-647A-120	Sequence 120, App
559	26	59.1	216	2	US-09-583-110-3072	Sequence 3072, Ap	632	26	59.1	345	2	US-09-468-647A-122	Sequence 122, App
560	26	59.1	219	2	US-09-435-019-65	Sequence 65, Appl	633	26	59.1	345	2	US-09-502-540-14706	Sequence 24149, A
561	26	59.1	219	2	US-10-065-200A-65	Sequence 65, Appl	634	26	59.1	345	2	US-09-352-991A-24149	Sequence 4030, Ap
562	26	59.1	219	2	US-10-065-200A-67	Sequence 67, Appl	635	26	59.1	345	2	US-09-134-000C-4030	Sequence 5676, Ap
563	26	59.1	219	2	US-10-065-200A-67	Sequence 67, Appl	636	26	59.1	345	2	US-09-328-352-5676	Sequence 118, App
564	26	59.1	219	2	US-09-107-433-3664	Sequence 3664, Ap	637	26	59.1	345	2	US-09-634-238-260	Sequence 260, App
565	26	59.1	225	2	US-09-605-703B-1224	Sequence 1224, Ap	638	26	59.1	345	2	US-09-248-796A-19504	Sequence 12030, A
566	26	59.1	234	2	US-09-602-787A-234	Sequence 234, App	639	26	59.1	384	2	US-09-949-016-10230	Sequence 4, Appl
567	26	59.1	241	2	US-09-198-452A-1044	Sequence 1044, Ap	640	26	59.1	384	2	US-09-328-352-484	Sequence 7844, Ap
568	26	59.1	241	2	US-09-438-185A-972	Sequence 972, App	641	26	59.1	384	2	US-09-518-383-4	Sequence 4, Appl
569	26	59.1	251	2	US-09-540-226-3483	Sequence 3483, Ap	642	26	59.1	384	2	US-09-377-557-18	Sequence 18, Appl
570	26	59.1	254	2	US-09-134-000C-6525	Sequence 6525, Ap	643	26	59.1	392	2	US-09-416-050A-2	Sequence 2, Appl
571	26	59.1	254	2	US-09-902-540-11698	Sequence 11698, A	644	26	59.1	392	2	US-09-664-800-2	Sequence 2, Appl
572	26	59.1	258	2	US-08-635-886C-197	Sequence 197, App	645	26	59.1	392	2	US-09-665-309-2	Sequence 2, Appl
573	26	59.1	258	2	US-09-107-532A-4489	Sequence 4489, Ap	646	26	59.1	392	2	US-09-661-869-2	Sequence 2, Appl
574	26	59.1	258	2	US-08-974-690C-197	Sequence 197, App	647	26	59.1	392	2	US-09-711-164-375	Sequence 6235, App
575	26	59.1	259	2	US-09-134-000C-4875	Sequence 4875, Ap	648	26	59.1	392	2	US-09-459-133-2	Sequence 2, Appl
576	26	59.1	260	2	US-09-205-258-346	Sequence 346, App	649	26	59.1	392	2	US-09-134-000C-6239	Sequence 6418, Ap
577	26	59.1	260	2	US-10-004-860-346	Sequence 346, App	650	26	59.1	398	2	US-09-107-532A-6418	Sequence 2, Appl
578	26	59.1	263	2	US-09-248-796A-15137	Sequence 15137, A	651	26	59.1	408	2	US-09-074-912-4	Sequence 4, Appl
579	26	59.1	271	2	US-09-252-991A-23450	Sequence 23450, A	652	26	59.1	408	2	US-09-074-912-4	Sequence 4, Appl
580	26	59.1	282	2	US-09-468-647A-112	Sequence 112, App	653	26	59.1	408	2	US-09-280-136-2	Sequence 2, Appl
581	26	59.1	287	2	US-09-328-352-7884	Sequence 7884, Ap	654	26	59.1	408	2	US-09-280-136-2	Sequence 2, Appl
582	26	59.1	291	1	US-08-568-459A-13	Sequence 25, Appl	655	26	59.1	408	2	US-09-280-136-2	Sequence 2, Appl
583	26	59.1	291	1	US-08-487-826B-25	Sequence 13, Appl	656	26	59.1	408	2	US-09-280-136-2	Sequence 2, Appl
584	26	59.1	291	2	US-09-210-288-13	Sequence 13, Appl	657	26	59.1	408	2	US-09-755-630B-287	Sequence 7, Appl
585	26	59.1	291	2	US-10-153-273-13	Sequence 13, Appl	658	26	59.1	408	2	US-10-658-180-877	Sequence 6107, App
586	26	59.1	294	2	US-09-252-991A-20737	Sequence 20737, A	659	26	59.1	419	2	US-09-543-681A-6107	Sequence 10, Appl
587	26	59.1	294	2	US-09-540-236-2814	Sequence 2814, Ap	660	26	59.1	419	2	US-09-516-747-10	Sequence 10, Appl
588	26	59.1	302	2	US-09-564-595D-54	Sequence 54, Appl	661	26	59.1	421	2	US-09-516-747-10	Sequence 10, Appl
589	26	59.1	303	2	US-09-564-595D-57	Sequence 57, Appl	662	26	59.1	421	2	US-09-902-540-14599	Sequence 14599, A
590	26	59.1	308	2	US-09-198-452A-606	Sequence 606, App	663	26	59.1	421	2	PCT-US96-10521-10	Sequence 10, Appl
591	26	59.1	308	2	US-09-438-185A-569	Sequence 569, App	664	26	59.1	422	4	US-09-949-016-11379	Sequence 11379, A
592	26	59.1	311	2	US-09-557-262-2	Sequence 2, Appl	665	26	59.1	424	2	US-09-489-039A-7974	Sequence 7974, Ap
593	26	59.1	312	2	US-08-258-287B-55	Sequence 55, Appl	666	26	59.1	424	2	US-09-328-352-7974	Sequence 27634, A
594	26	59.1	312	2	US-08-368-704C-53	Sequence 53, Appl	667	26	59.1	425	2	US-09-252-991A-27634	Sequence 21851, A
595	26	59.1	313	2	US-09-134-000C-6101	Sequence 6101, Ap	668	26	59.1	429	2	US-09-252-991A-21851	Sequence 4, Appl
596	26	59.1	317	2	US-09-134-000C-8688	Sequence 8688, Ap	669	26	59.1	433	2	US-09-430-221-4	Sequence 18011, A
597	26	59.1	323	2	US-09-468-647A-1	Sequence 1, Appl	670	26	59.1	434	2	US-09-252-991A-18011	Sequence 45, Appl
598	26	59.1	325	2	US-09-252-991A-18010	Sequence 18010, A	671	26	59.1	434	2	US-09-964-889-45	Sequence 53, Appl
599	26	59.1	328	2	US-09-949-016-7278	Sequence 7278, Ap	672	26	59.1	434	2	US-08-258-287B-53	Sequence 51, Appl
600	26	59.1	330	2	US-09-359-161-6	Sequence 6, Appl	673	26	59.1	435	2	US-08-368-704C-51	Sequence 9, Appl
601	26	59.1	331	1	US-08-878-989-21	Sequence 21, Appl	674	26	59.1	435	2	US-09-561-756-9	Sequence 9, Appl
602	26	59.1	331	2	US-09-101-146-64	Sequence 64, Appl	675	26	59.1	435	2	US-09-227-721-9	Sequence 9, Appl
603	26	59.1	331	2	US-09-272-796-21	Sequence 21, Appl	676	26	59.1	435	2	US-08-816-075-2	Sequence 9, Appl
604	26	59.1	331	2	US-09-538-092-1211	Sequence 1211, Ap	677	26	59.1	435	2	US-08-724-378D-9	Sequence 9, Appl
605	26	59.1	334	2	US-09-605-703B-1222	Sequence 1222, Ap	678	26	59.1	435	2	US-09-934-637-9	Sequence 9, Appl
606	26	59.1	336	2	US-09-949-016-10881	Sequence 10881, A	679	26	59.1	435	2	US-09-291-289-10	Sequence 10, Appl
607	26	59.1	340	1	US-08-462-195-2	Sequence 2, Appl	680	26	59.1	435	2	US-09-851-873-97	Sequence 4, Appl
608	26	59.1	340	1	US-08-636-883-2	Sequence 2, Appl	681	26	59.1	435	2	PCT-US94-07127A-4	Sequence 44, Appl
609	26	59.1	340	2	US-09-127-823-2	Sequence 2, Appl	682	26	59.1	441	2	US-08-258-287B-44	Sequence 43, Appl
610	26	59.1	345	2	US-09-040-220D-2	Sequence 2, Appl	683	26	59.1	441	2	US-08-368-704C-43	Sequence 43, Appl
611	26	59.1	345	2	US-09-457-066-2	Sequence 2, Appl	684	26	59.1	441	2		

685	26	59.1	450	2	US-08-635-086C-189	Sequence 189, App	758	26	59.1	650	2	US-09-107-433-3515	Sequence 3515, App
686	26	59.1	450	2	US-08-974-690C-189	Sequence 189, App	759	26	59.1	655	2	US-09-245-808-1	Sequence 1, App11
687	26	59.1	453	2	US-09-491-577-44	Sequence 44, App1	760	26	59.1	655	2	US-09-767-594-1	Sequence 1, App11
688	26	59.1	455	2	US-09-270-767-33247	Sequence 33247, A	761	26	59.1	655	2	US-09-584-586-10	Sequence 10, App1
689	26	59.1	455	2	US-09-270-767-48464	Sequence 48464, A	762	26	59.1	657	2	US-09-584-586-14	Sequence 14, App1
690	26	59.1	455	2	US-10-104-047-3818	Sequence 3818, Ap	763	26	59.1	661	2	US-10-037-417-107	Sequence 107, App
691	26	59.1	455	2	US-09-502-540-13166	Sequence 13166, A	764	26	59.1	664	2	US-09-805-455-5	Sequence 5, App1
692	26	59.1	470	2	US-09-248-796A-18482	Sequence 18482, A	765	26	59.1	666	2	US-09-134-001C-5465	Sequence 5465, App
693	26	59.1	475	2	US-09-252-991A-20366	Sequence 20366, A	766	26	59.1	668	2	US-09-352-991A-32973	Sequence 32973, A
694	26	59.1	476	2	US-09-252-991A-20366	Sequence 20366, A	767	26	59.1	669	2	US-09-949-016-6887	Sequence 6887, Ap
695	26	59.1	482	2	US-09-270-767-44606	Sequence 44606, A	768	26	59.1	674	2	US-08-653-648A-14	Sequence 14, App1
696	26	59.1	485	2	US-09-328-352-8210	Sequence 8210, Ap	769	26	59.1	674	2	US-09-252-991A-18107	Sequence 18107, A
697	26	59.1	485	2	US-09-328-352-8210	Sequence 8210, Ap	770	26	59.1	674	2	US-09-252-991A-26864	Sequence 26864, A
698	26	59.1	485	2	US-09-949-016-6362	Sequence 6362, Ap	771	26	59.1	675	2	US-09-564-418-12	Sequence 12, App1
699	26	59.1	486	2	US-09-248-796A-18727	Sequence 18727, A	772	26	59.1	676	2	US-09-107-532A-3627	Sequence 5627, Ap
700	26	59.1	488	2	US-09-489-039A-11521	Sequence 11521, A	773	26	59.1	677	2	US-09-949-016-8351	Sequence 8351, Ap
701	26	59.1	490	2	US-09-134-000C-6176	Sequence 6176, Ap	774	26	59.1	698	2	US-09-134-001C-36332	Sequence 3632, Ap
702	26	59.1	493	2	US-09-949-016-9841	Sequence 9841, Ap	775	26	59.1	706	2	US-09-408-820-2	Sequence 2, App11
703	26	59.1	494	2	US-09-902-540-16588	Sequence 16588, A	776	26	59.1	715	2	US-09-949-016-7473	Sequence 7423, Ap
704	26	59.1	497	2	US-09-134-000C-4549	Sequence 4549, Ap	777	26	59.1	719	2	US-09-583-110-4180	Sequence 4180, Ap
705	26	59.1	501	2	US-10-142-231-58	Sequence 58, App1	778	26	59.1	720	2	US-09-257-799-48	Sequence 48, App1
706	26	59.1	504	2	US-09-487-558B-208	Sequence 208, App	779	26	59.1	720	2	US-08-920-919A-48	Sequence 48, App1
707	26	59.1	506	2	US-09-328-352-5523	Sequence 5523, Ap	780	26	59.1	720	2	US-09-328-352-4435	Sequence 4435, Ap
708	26	59.1	510	2	US-09-252-991A-22017	Sequence 22017, A	781	26	59.1	723	2	US-09-252-991A-18279	Sequence 18279, A
709	26	59.1	522	2	US-09-134-001C-4469	Sequence 4469, Ap	782	26	59.1	726	2	US-09-129-075-4	Sequence 4, App11
710	26	59.1	522	1	US-08-305-505-2	Sequence 2, App11	783	26	59.1	726	2	US-09-346-237-13	Sequence 3, App11
711	26	59.1	532	1	US-08-188-228-44	Sequence 44, App1	784	26	59.1	726	2	US-09-346-237-13	Sequence 13, App1
712	26	59.1	532	1	US-08-332-638-44	Sequence 44, App1	785	26	59.1	726	2	US-09-544-123-4	Sequence 4, App11
713	26	59.1	532	2	US-09-270-767-46234	Sequence 46234, A	786	26	59.1	728	2	US-09-107-433-4330	Sequence 4330, Ap
714	26	59.1	533	1	US-08-770-544-4	Sequence 4, App11	787	26	59.1	738	2	US-09-543-681A-7528	Sequence 7528, Ap
715	26	59.1	533	2	US-09-579-359-4	Sequence 4, App11	788	26	59.1	743	2	US-09-134-000C-4684	Sequence 4684, Ap
716	26	59.1	533	2	US-09-650-324A-4	Sequence 4, App11	789	26	59.1	778	6	US-09-134-000C-4684	Sequence 4684, Ap
717	26	59.1	533	2	US-10-039-112A-4	Sequence 4, App11	790	26	59.1	785	2	US-09-133-643B-2	Sequence 2, App11
718	26	59.1	540	2	US-09-621-451-2	Sequence 2, App11	791	26	59.1	785	2	US-09-902-540-16175	Sequence 16175, A
719	26	59.1	540	2	US-10-223-355-2	Sequence 2, App11	792	26	59.1	785	2	US-09-710-262E-3	Sequence 3, App11
720	26	59.1	544	2	US-09-621-448-2	Sequence 2, App11	793	26	59.1	791	2	US-09-902-540-15618	Sequence 15618, A
721	26	59.1	544	2	US-09-248-796A-18911	Sequence 18911, A	794	26	59.1	793	1	US-08-188-228-54	Sequence 54, App1
722	26	59.1	550	2	US-09-252-991A-18287	Sequence 18287, A	795	26	59.1	793	1	US-08-332-643-48	Sequence 48, App1
723	26	59.1	550	2	US-09-336-478A-2	Sequence 2, App11	796	26	59.1	793	1	US-08-332-643-54	Sequence 54, App1
724	26	59.1	551	2	US-08-896-537A-2	Sequence 2, App11	797	26	59.1	795	1	US-09-107-532A-5429	Sequence 5429, Ap
725	26	59.1	551	2	US-09-902-540-13537	Sequence 13537, A	798	26	59.1	799	1	US-08-188-228-42	Sequence 42, App1
726	26	59.1	551	2	US-09-583-110-5306	Sequence 5306, Ap	799	26	59.1	799	1	US-08-332-638-42	Sequence 42, App1
727	26	59.1	554	2	US-09-949-016-10978	Sequence 10978, A	799	26	59.1	824	2	US-09-538-092-1041	Sequence 1041, Ap
728	26	59.1	558	2	US-09-107-433-4472	Sequence 4472, Ap	800	26	59.1	843	2	US-09-873-737A-2	Sequence 2, App11
729	26	59.1	560	2	US-09-134-001C-4343	Sequence 4343, Ap	801	26	59.1	844	2	US-10-043-774B-13	Sequence 13, App1
730	26	59.1	560	2	US-09-435-019-9	Sequence 9, App11	802	26	59.1	859	1	US-08-053-614-2	Sequence 2, App11
731	26	59.1	560	2	US-10-065-200A-6	Sequence 6, App11	803	26	59.1	859	1	US-08-053-614-2	Sequence 2, App11
732	26	59.1	560	2	US-10-065-200A-9	Sequence 9, App11	804	26	59.1	859	1	US-08-316-397B-2	Sequence 2, App11
733	26	59.1	561	2	US-09-435-019-14	Sequence 14, App1	805	26	59.1	859	2	US-09-359-437-2	Sequence 2, App11
734	26	59.1	561	2	US-09-435-019-14	Sequence 14, App1	807	26	59.1	859	4	PCT-US93-09782-2	Sequence 2, App11
735	26	59.1	561	2	US-10-065-200A-14	Sequence 14, App1	808	26	59.1	935	2	US-09-538-092-682	Sequence 682, App
736	26	59.1	561	2	US-10-065-200A-17	Sequence 17, App1	809	26	59.1	980	2	US-09-338-092-1310	Sequence 1310, Ap
737	26	59.1	584	2	US-09-710-279-2832	Sequence 2832, Ap	810	26	59.1	1047	2	US-08-311-731A-2	Sequence 2, App11
738	26	59.1	584	2	US-08-946-412-2	Sequence 2, App11	811	26	59.1	1115	1	US-09-252-991A-31259	Sequence 31259, A
739	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	812	26	59.1	1115	1	US-08-568-459A-2	Sequence 2, App11
740	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	813	26	59.1	1115	1	US-08-487-826B-2	Sequence 2, App11
741	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	814	26	59.1	1115	2	US-09-210-288-2	Sequence 2, App11
742	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	815	26	59.1	1115	2	US-10-153-273-2	Sequence 2, App11
743	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	816	26	59.1	1115	6	5198347-6	Sequence 6, App11
744	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	817	26	59.1	1115	2	US-09-583-110-4409	Sequence 4409, Ap
745	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	818	26	59.1	1115	2	US-09-107-433-4487	Sequence 4487, Ap
746	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	819	26	59.1	1181	1	US-08-053-614-4	Sequence 4, App11
747	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	820	26	59.1	1181	1	US-08-316-397B-4	Sequence 4, App11
748	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	821	26	59.1	1181	1	US-09-334-306-4	Sequence 4, App11
749	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	822	26	59.1	1181	1	US-09-259-437-4	Sequence 4, App11
750	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	823	26	59.1	1181	4	PCT-US93-09782-4	Sequence 4, App11
751	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	824	26	59.1	1181	2	US-09-248-796A-20654	Sequence 20654, A
752	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	825	26	59.1	1181	2	US-09-802-540-16497	Sequence 16497, A
753	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	826	26	59.1	1181	2	US-09-949-016-10190	Sequence 10190, A
754	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	827	26	59.1	1181	2	US-09-917-254-83	Sequence 83, App1
755	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	828	26	59.1	1181	2	US-09-949-016-6743	Sequence 6743, Ap
756	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	829	26	59.1	1181	2	US-09-712-363-262	Sequence 262, App
757	26	59.1	584	2	US-09-934-901-14	Sequence 14, App1	830	26	59.1	1181	2	US-09-328-352-7347	Sequence 7347, Ap

831	26	59.1	1688	2	US-10-042-665A-7	Sequence 7, Appl	904	25	56.8	126	2	US-09-540-236-2622	Sequence 2622, Ap
832	26	59.1	1798	2	US-09-270-767-60233	Sequence 60233, A	905	25	56.8	127	2	US-09-540-236-2954	Sequence 2954, Ap
833	26	59.1	2206	1	US-07-852-260-2	Sequence 2, Appl1	906	25	56.8	127	2	US-09-893-377-48	Sequence 48, Ap
834	26	59.1	2206	1	US-08-461-503-2	Sequence 2, Appl1	907	25	56.8	127	2	US-10-037-417-54	Sequence 54, Appl
835	26	59.1	2206	2	US-08-465-250-2	Sequence 2, Appl1	908	25	56.8	130	2	US-09-270-767-35203	Sequence 35203, A
836	26	59.1	2237	1	US-08-354-973-1	Sequence 1, Appl1	909	25	56.8	130	2	US-09-270-767-50420	Sequence 50420, A
837	26	59.1	2322	2	US-09-976-994-15	Sequence 15, Appl	910	25	56.8	132	2	US-09-205-258-796	Sequence 796, App
838	26	59.1	2322	2	US-09-919-039-15	Sequence 15, Appl	911	25	56.8	132	2	US-10-004-860-796	Sequence 796, App
839	26	59.1	2324	2	US-09-902-540-9732	Sequence 9732, Ap	912	25	56.8	134	2	US-09-621-976-5090	Sequence 5090, Ap
840	26	59.1	2410	2	US-09-270-767-44775	Sequence 44775, A	913	25	56.8	136	2	US-09-183-861-49	Sequence 49, Appl
841	26	59.1	2867	2	US-09-902-540-12593	Sequence 12593, A	914	25	56.8	136	2	US-09-022-765-45	Sequence 49, Appl
842	26	59.1	3010	2	US-09-014-416-3	Sequence 3, Appl1	915	25	56.8	136	2	US-09-551-974A-49	Sequence 49, Appl
843	26	59.1	3011	2	US-09-014-416-5	Sequence 5, Appl1	916	25	56.8	136	2	US-09-565-501A-49	Sequence 49, Appl
844	26	59.1	3878	2	US-09-914-259-11	Sequence 11, Appl	917	25	56.8	136	2	US-09-639-206A-49	Sequence 49, Appl
845	25	58.0	138	1	US-08-484-397A-15	Sequence 9, Appl1	918	25	56.8	140	2	US-09-874-923-49	Sequence 49, Appl
846	25	58.0	152	1	US-08-484-397A-9	Sequence 10, Appl	919	25	56.8	140	2	US-09-248-796A-20294	Sequence 20294, A
847	25	58.0	152	1	US-08-484-397A-10	Sequence 11, Appl	920	25	56.8	140	2	US-09-513-999C-6667	Sequence 6667, App
848	25	58.0	152	1	US-08-484-397A-11	Sequence 12, Appl	921	25	56.8	142	2	US-09-198-452A-695	Sequence 695, App
849	25	58.0	152	1	US-08-484-397A-12	Sequence 13, Appl	922	25	56.8	142	2	US-09-134-000C-4062	Sequence 4062, Ap
850	25	58.0	152	1	US-08-484-397A-13	Sequence 14, Appl	923	25	56.8	142	2	US-09-438-185A-659	Sequence 659, App
851	25	58.0	152	1	US-08-484-397A-14	Sequence 15, Appl	924	25	56.8	142	2	US-09-640-211A-1166	Sequence 1166, Ap
852	25	58.0	334	1	US-08-484-397A-4	Sequence 8, Appl1	925	25	56.8	145	2	US-09-603-208A-94	Sequence 4012, Ap
853	25	58.0	348	1	US-08-366-953A-45	Sequence 45, Appl	926	25	56.8	145	2	US-09-134-000C-4012	Sequence 94, Appl
854	25	58.0	348	1	US-08-484-397A-2	Sequence 2, Appl1	927	25	56.8	145	2	US-09-640-211A-1064	Sequence 1064, Ap
855	25	58.0	348	1	US-08-484-397A-3	Sequence 3, Appl1	928	25	56.8	146	2	US-08-979-847B-132	Sequence 132, App
856	25	58.0	348	1	US-08-484-397A-4	Sequence 4, Appl1	929	25	56.8	146	2	US-08-979-847B-133	Sequence 133, App
857	25	58.0	348	1	US-08-484-397A-5	Sequence 5, Appl1	930	25	56.8	146	2	US-08-979-847B-134	Sequence 202, App
858	25	58.0	348	1	US-08-484-397A-6	Sequence 6, Appl1	931	25	56.8	146	2	US-08-979-847B-202	Sequence 209, App
859	25	58.0	348	1	US-08-484-397A-7	Sequence 7, Appl1	932	25	56.8	146	2	US-08-979-847B-209	Sequence 123, App
860	25	58.0	348	1	US-08-484-397A-27	Sequence 27, Appl	933	25	56.8	147	2	US-09-345-236B-123	Sequence 2378, Ap
861	25	58.0	348	1	US-08-484-397A-38	Sequence 38, Appl	934	25	56.8	147	2	US-09-605-703B-2378	Sequence 47, Appl
862	25	58.0	356	1	US-09-806-158-1	Sequence 1, Appl1	935	25	56.8	150	2	US-09-438-185A-31	Sequence 31, Appl
863	25	58.0	375	1	US-08-205-719-2	Sequence 2, Appl1	936	25	56.8	151	2	US-09-134-000C-3516	Sequence 3516, Ap
864	25	58.0	375	2	US-08-746-883-5	Sequence 5, Appl1	937	25	56.8	152	2	US-09-270-767-2324	Sequence 32324, A
865	25	58.0	375	2	US-09-313-177-5	Sequence 5, Appl1	938	25	56.8	152	2	US-09-270-767-47541	Sequence 47541, A
866	25	56.8	12	2	US-09-721-870-77	Sequence 77, Appl	939	25	56.8	153	2	US-09-621-976-6517	Sequence 4617, A
867	25	56.8	12	2	US-09-693-746-56	Sequence 56, Appl	940	25	56.8	153	2	US-09-621-976-6912	Sequence 6912, Ap
868	25	56.8	12	2	US-09-693-746-73	Sequence 73, Appl	941	25	56.8	153	2	US-09-710-279-308	Sequence 308, App
869	25	56.8	20	2	US-09-962-756-746	Sequence 746, App	942	25	56.8	155	2	US-08-120-607A-7	Sequence 7, Appl1
870	25	56.8	20	2	US-09-962-756-913	Sequence 913, App	943	25	56.8	165	1	US-09-248-796A-17985	Sequence 17985, A
871	25	56.8	20	2	US-09-962-756-924	Sequence 924, App	944	25	56.8	165	2	US-09-248-796A-22177	Sequence 22177, A
872	25	56.8	29	2	US-09-205-258-797	Sequence 797, App	945	25	56.8	173	2	US-09-248-796A-129177	Sequence 3905, App
873	25	56.8	29	2	US-09-962-756-1375	Sequence 1375, Ap	946	25	56.8	175	2	US-10-104-047-3905	Sequence 26, Appl
874	25	56.8	29	2	US-10-004-860-797	Sequence 797, App	947	25	56.8	176	2	US-09-522-433B-26	Sequence 40943, A
875	25	56.8	59	2	US-09-390-027-6	Sequence 6, Appl1	948	25	56.8	177	2	US-09-270-767-40993	Sequence 40993, A
876	25	56.8	66	2	US-09-513-999C-4998	Sequence 4998, Ap	949	25	56.8	181	2	US-09-270-767-33157	Sequence 33157, A
877	25	56.8	73	1	US-08-370-225-12	Sequence 12, Appl	950	25	56.8	181	2	US-09-257-825B-7	Sequence 7, Appl1
878	25	56.8	73	1	US-08-461-859-12	Sequence 12, Appl	951	25	56.8	191	2	US-09-257-825B-7	Sequence 27869, A
879	25	56.8	73	4	PCR-0593-10069-12	Sequence 12, Appl	952	25	56.8	191	2	US-09-438-185A-822	Sequence 822, App
880	25	56.8	77	2	US-09-583-110-3295	Sequence 3295, Ap	953	25	56.8	191	2	US-09-270-767-48374	Sequence 48374, A
881	25	56.8	80	2	US-09-763-620-25	Sequence 25, Appl	954	25	56.8	191	2	US-08-655-352-7	Sequence 7, Appl1
882	25	56.8	86	2	US-09-270-767-57072	Sequence 57072, A	955	25	56.8	193	2	US-09-257-825B-7	Sequence 7, Appl1
883	25	56.8	86	2	US-09-949-016-10688	Sequence 10688, A	956	25	56.8	200	2	US-09-438-185A-822	Sequence 4, Appl1
884	25	56.8	88	2	US-09-107-433-3271	Sequence 4348, Ap	957	25	56.8	202	2	US-09-134-000C-5644	Sequence 5644, Ap
885	25	56.8	88	2	US-09-107-433-3271	Sequence 3271, Ap	958	25	56.8	203	2	US-09-198-452A-879	Sequence 879, App
886	25	56.8	89	2	US-09-248-796A-15045	Sequence 45045, A	959	25	56.8	206	2	US-09-107-433-3971	Sequence 3971, Ap
887	25	56.8	90	2	US-09-107-532A-4309	Sequence 4309, Ap	960	25	56.8	206	2	US-09-438-185A-822	Sequence 822, App
888	25	56.8	90	2	US-09-513-999C-5586	Sequence 5586, Ap	961	25	56.8	206	2	US-09-252-991A-16678	Sequence 16678, App
889	25	56.8	91	2	US-09-513-999C-4782	Sequence 4782, Ap	962	25	56.8	207	2	US-09-134-000C-4384	Sequence 4384, Ap
890	25	56.8	94	2	US-09-107-433-4000	Sequence 4734, Ap	963	25	56.8	212	2	US-09-123-000C-4384	Sequence 4384, Ap
891	25	56.8	104	2	US-09-513-999C-4734	Sequence 4734, Ap	964	25	56.8	216	2	US-09-252-991A-21062	Sequence 21062, A
892	25	56.8	107	2	US-09-252-991A-32458	Sequence 32458, A	965	25	56.8	222	2	US-09-489-039A-13445	Sequence 13445, A
893	25	56.8	115	2	US-09-219-983A-4	Sequence 4, Appl1	966	25	56.8	222	2	US-09-489-039A-10946	Sequence 10946, A
894	25	56.8	115	2	US-09-270-767-57341	Sequence 57341, A	967	25	56.8	226	2	US-09-270-767-1679	Sequence 1679, A
895	25	56.8	115	2	US-10-114-774-4	Sequence 4, Appl1	968	25	56.8	227	2	US-09-489-039A-12794	Sequence 12794, A
896	25	56.8	120	2	US-09-543-681A-4750	Sequence 4750, Ap	969	25	56.8	228	2	US-09-248-796A-23334	Sequence 23334, A
897	25	56.8	123	2	US-09-148-545-200	Sequence 200, App	970	25	56.8	230	2	US-09-605-703B-1564	Sequence 1564, Ap
898	25	56.8	123	2	US-09-621-976-5367	Sequence 5367, Ap	971	25	56.8	230	2	US-09-328-352-7370	Sequence 7370, Ap
899	25	56.8	123	2	US-09-621-011-200	Sequence 200, App	972	25	56.8	235	2	US-09-489-039A-9828	Sequence 9828, Ap
900	25	56.8	123	2	US-09-991-181-117	Sequence 117, App	973	25	56.8	236	2	US-09-134-001C-4085	Sequence 4085, Ap
901	25	56.8	123	2	US-09-990-444-117	Sequence 117, App	974	25	56.8	236	2	US-09-270-767-38423	Sequence 38423, A
902	25	56.8	123	2	US-09-997-333-117	Sequence 117, App	975	25	56.8	236	2	US-09-270-767-53640	Sequence 53640, A
903	25	56.8	123	2	US-09-992-598-117	Sequence 117, App	976	25	56.8	236	2	US-09-270-767-53640	Sequence 53640, A

```
977 25 56.8 237 2 US-09-270-767-41826 Sequence 41826, A
978 25 56.8 243 2 US-09-602-787A-368 Sequence 368, App
979 25 56.8 248 2 US-09-134-001C-4299 Sequence 4299, Ap
980 25 56.8 249 2 US-09-270-767-56701 Sequence 56701, A
981 25 56.8 250 2 US-09-291-170A-12 Sequence 12, Appl
982 25 56.8 250 2 US-09-724-884-12 Sequence 12, Appl
983 25 56.8 250 2 US-09-724-884-12 Sequence 12, Appl
984 25 56.8 250 2 US-09-673-222-12 Sequence 12, Appl
985 25 56.8 251 2 US-09-252-991A-23816 Sequence 23816, A
986 25 56.8 252 2 US-09-902-540-13250 Sequence 13250, A
987 25 56.8 252 2 US-09-107-433-4875 Sequence 4875, Ap
988 25 56.8 256 2 US-09-248-796A-21111 Sequence 21111, A
989 25 56.8 257 2 US-09-270-767-44281 Sequence 44281, A
990 25 56.8 257 2 US-09-134-001C-3361 Sequence 3361, Ap
991 25 56.8 259 2 US-09-252-991A-26881 Sequence 26881, A
992 25 56.8 269 2 US-09-328-352-7904 Sequence 7904, Ap
993 25 56.8 272 2 US-09-252-991A-17567 Sequence 17567, A
994 25 56.8 277 2 US-09-252-991A-17567 Sequence 17567, A
995 25 56.8 279 2 US-09-583-110-3801 Sequence 3801, Ap
996 25 56.8 279 2 US-09-270-767-46472 Sequence 46472, A
997 25 56.8 282 2 US-09-252-991A-28046 Sequence 28046, A
998 25 56.8 283 2 US-09-458-779-2 Sequence 2, Appl
999 25 56.8 292 2 US-09-540-236-3287 Sequence 3287, Ap
1000 25 56.8 295 2 US-09-328-352-5181 Sequence 5181, Ap
```

ALIGNMENTS

```
RESULT 1
US-10-365-908-6
; Sequence 6, Application US/10365908
; Patent No. 6797491
```

```
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-6
```

```
Query Match 100.0%; Score 44; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLEDLMT 9
Db 1 TLEDLMT 9
```

```
RESULT 2
US-10-365-908-18
; Sequence 18, Application US/10365908
; Patent No. 6797491
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
```

```
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-18
```

```
Query Match 100.0%; Score 44; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0068;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLEDLMT 9
Db 2 TLEDLMT 10
```

```
RESULT 3
US-10-365-908-42
; Sequence 42, Application US/10365908
; Patent No. 6797491
```

```
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 42
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-42
```

```
Query Match 100.0%; Score 44; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0068;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLEDLMT 9
Db 1 TLEDLMT 9
```

```
RESULT 4
US-08-075-541D-49
; Sequence 49, Application US/08075541D
; Patent No. 6183745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, ROBERT
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
```


ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 49:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-49

Query Match 100.0%; Score 44; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLNGT 9
DB 9 TLEDDLNGT 17

RESULT 5
US-08-075-541D-50
Sequence 50, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-50

Query Match 100.0%; Score 44; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLNGT 9
DB 4 TLEDDLNGT 12

RESULT 6
US-09-980-177A-75
Sequence 75, Application US/09980177A
Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Jochims, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
TITLE OF INVENTION: Therapy
FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/09/980,177A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 1992519.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 75
LENGTH: 20
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-980-177A-75

Query Match 100.0%; Score 44; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLNGT 9
DB 12 TLEDDLNGT 20

RESULT 7
US-08-934-915-50
Sequence 50, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEE-MING

```

; TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
; TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
; TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
; TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
; TITLE OF INVENTION: DIAGNOSTIC PURPOSES
; NUMBER OF SEQUENCES: 193
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MASON & ASSOCIATES, P.A.
; STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
; CITY: CLEARWATER
; STATE: FLORIDA
; COUNTRY: U.S.A.
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Windows 3.0
; SOFTWARE: Microsoft Word 6.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/934,915
; FILING DATE: 22-SEP-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/949,836
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LOUISE A. FOUTCH
; REGISTRATION NUMBER: 37,133
; REFERENCE/DOCKET NUMBER: 1946.6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 813-538-3800
; TELEFAX: 813-538-3820
; TELEX:
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-934-915-50

Query Match          100.0%; Score 44; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      1 TLEDLMGT 9

RESULT 8
US-09-980-177A-76
; Sequence 76, Application US/09980177A
; Patent No. 6838084
; GENERAL INFORMATION:
; APPLICANT: Jochmus, Ingrid
; APPLICANT: Nieland, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; TITLE OF INVENTION: Therapy
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/09/980,177A
; CURRENT FILING DATE: 2001-11-29
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 76
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; US-09-980-177A-76
```

```

Query Match          100.0%; Score 44; DB 2; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      1 TLEDLMGT 9

RESULT 9
US-08-075-541D-40
; Sequence 40, Application US/08075541D
; Patent No. 618745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/075,541D
; FILING DATE: 10-JUN-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: AU p/k 3876
; FILING DATE: 12-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/AU91/00575
; FILING DATE: 12-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: NADEL, ALAN S
; REGISTRATION NUMBER: 27,363
; REFERENCE/DOCKET NUMBER: 8795-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-567-2020
; TELEFAX: 215-567-2991
; INFORMATION FOR SEQ ID NO: 40:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-075-541D-40

Query Match          100.0%; Score 44; DB 2; Length 26;
Best Local Similarity 100.0%; Pred. No. 0.021;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      7 TLEDLMGT 15

RESULT 10
US-09-486-394-5
; Sequence 5, Application US/09486394
; Patent No. 6478749
; GENERAL INFORMATION:
```

APPLICANT: Hopfl, Reinhard
TITLE OF INVENTION: Diagnostic Kit for Skin Tests, and Method
FILE REFERENCE: 032929-001
CURRENT APPLICATION NUMBER: US/09/486,394
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/04773
PRIOR FILING DATE: 1998-07-30
PRIOR APPLICATION NUMBER: DE 197 37 409.3
PRIOR FILING DATE: 1997-08-27
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 28
TYPE: PRT
ORGANISM: Human papillomavirus type 16
NAME/KEY: PEPTIDE
LOCATION: (1)..(28)
OTHER INFORMATION: E7 peptide.
US-09-486-394-5

Query Match 100.0%; Score 44; DB 2; Length 28;
Best Local Similarity 100.0%; Pred. No. 0.023;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 8 TLEDLMGT 16

RESULT 11
US-08-934-915-53
Sequence 53, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESSES:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foulch 37,133
REGISTRATION NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids

TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-53

Query Match 100.0%; Score 44; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.024;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 21 TLEDLMGT 29

RESULT 12
US-08-934-915-54
Sequence 54, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESSES:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foulch 37,133
REGISTRATION NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 54:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-54

Query Match 100.0%; Score 44; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.024;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 10 TLEDLMGT 18

RESULT 13
US-09-486-394-4

```
; Sequence 4, Application US/09486394
; Patent No. 6478749
; GENERAL INFORMATION:
; APPLICANT: Hopfl, Reinhard
; TITLE OF INVENTION: Diagnostic Kit for Skin Tests, and Method
; FILE REFERENCE: 032929-001
; CURRENT APPLICATION NUMBER: US/09/486,394
; CURRENT FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: PCT/EP98/04773
; PRIOR FILING DATE: 1998-07-30
; PRIOR APPLICATION NUMBER: DE 197 37 409.3
; PRIOR FILING DATE: 1997-08-27
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (1)..(30)
; OTHER INFORMATION: E7 peptide.
US-09-486-394-4

Query Match      100.0%; Score 44; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.024;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TLEDLMGT 9
Db      18 TLEDLMGT 26

RESULT 14
US-08-406-248-6
; Sequence 6, Application US/08406248
; Patent No. 5736318
; GENERAL INFORMATION:
; APPLICANT: Munger, Karl
; APPLICANT: Jones, D. Leanne
; TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
; TITLE OF INVENTION: TRANSFORMED CELLS
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kuemer
; STREET: 200 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/406,248
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: McDaniel, Patricia A.
; REGISTRATION NUMBER: 33,194
; REFERENCE/DOCKET NUMBER: HAZ-011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-406-248-6
```

```
Query Match      100.0%; Score 44; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TLEDLMGT 9
Db      78 TLEDLMGT 86

RESULT 15
US-08-075-541D-42
; Sequence 42, Application US/08075541D
; Patent No. 6183745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/075,541D
; FILING DATE: 10-JUN-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: AU pk 3876
; FILING DATE: 12-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: pcc/au91/00575
; FILING DATE: 12-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: NADEL, ALAN S
; REGISTRATION NUMBER: 27,363
; REFERENCE/DOCKET NUMBER: 8795-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-567-2020
; TELEFAX: 215-567-2991
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-075-541D-42

Query Match      100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TLEDLMGT 9
Db      78 TLEDLMGT 86

RESULT 16
US-09-382-616A-1
; Sequence 1, Application US/09382616A
; Patent No. 6200746
; GENERAL INFORMATION:
```

```

; APPLICANT: Fisher, Christopher
; APPLICANT: He, Wanxia
; TITLE OF INVENTION: Methods to identify Anti-Viral Agents
; FILE REFERENCE: 28341/6216
; CURRENT APPLICATION NUMBER: US/09/382,616A
; CURRENT FILING DATE: 1999-08-25
; PRIOR APPLICATION NUMBER: 09/382,616
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 1
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Papillomavirus sylvilagi
US-09-382-616A-1

Query Match      100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLIEDLMGT 9
Db 78 TLIEDLMGT 86

RESULT 17
US-08-944-368A-4
; Sequence 4, Application US/08944368A
; Patent No. 6228368
; GENERAL INFORMATION:
; APPLICANT: Giesman, et al.
; TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine
; TITLE OF INVENTION: Formulations and Methods of Use
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
; ADDRESSEE: Borun
; STREET: 233 South Wacker Drive, 6300 Sears Tower
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentln Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/944,368A
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Williams Jr., Joseph A.
; REGISTRATION NUMBER: 38,659
; REFERENCE/DOCKET NUMBER: 27013/34028
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-474-6300
; TELEFAX: 312-474-0448
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-944-368A-4

Query Match      100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLIEDLMGT 9
Db 78 TLIEDLMGT 86
```

```

RESULT 18
US-09-820-764-4
; Sequence 4, Application US/09820764
; Patent No. 6352696
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; APPLICANT: HALBER, Michael
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
; TITLE OF INVENTION: FORMULATIONS AND METHODS OF USE
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentln Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/820,764
; FILING DATE: 30-Mar-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/026,896
; FILING DATE: 20-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Sandercok, Colin G.
; REGISTRATION NUMBER: 31,298
; REFERENCE/DOCKET NUMBER: 37067/102
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-764-4

Query Match      100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLIEDLMGT 9
Db 78 TLIEDLMGT 86

RESULT 19
US-09-613-303-8
; Sequence 8, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
```

LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMT 9
Db 78 TLEDLMT 86

RESULT 20
US-09-566-420-19
Sequence 19, Application US/09566420

PATENT NO. 6500641
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/09/566,420
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-09-566-420-19

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMT 9
Db 78 TLEDLMT 86

RESULT 21
US-09-986-118A-4
Sequence 4, Application US/09986118A
Patent No. 6562351
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander

TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-NO. 6562351-2001

CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMT 9
Db 78 TLEDLMT 86

RESULT 22
US-09-728-466-1
Sequence 1, Application US/09728466
Patent No. 6641994
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMT 9
Db 78 TLEDLMT 86

RESULT 23
US-09-824-017-4
Sequence 4, Application US/09824017
Patent No. 6649167
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington

STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017
FILING DATE: 03-Apr-2001
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86

RESULT 24
US-10-267-311-8
Sequence 8, Application US/10267311
Patent No. 6657055
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIORITY APPLICATION NUMBER: US/09/613,303
PRIORITY FILING DATE: 2000-07-10
PRIORITY APPLICATION NUMBER: US 60/143,757
PRIORITY FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86

RESULT 25
US-10-201-764-19
Sequence 19, Application US/10201764
Patent No. 6716623
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/10/201,764
CURRENT FILING DATE: 2002-07-22
PRIORITY APPLICATION NUMBER: US/09/566,420
PRIORITY FILING DATE: 2000-05-05
PRIORITY APPLICATION NUMBER: 60/132,752
PRIORITY FILING DATE: 1999-05-06
PRIORITY APPLICATION NUMBER: 60/132,750
PRIORITY FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86

RESULT 26
US-09-637-746-3
Sequence 3, Application US/09637746
Patent No. 6727079
GENERAL INFORMATION:
APPLICANT: Thorgeirsson, Snorri S.
APPLICANT: Moltach, Joseph T.
APPLICANT: Zhang, Minghuang
TITLE OF INVENTION: CDNA ENCODING A GENE BOG (BET OVER-EXPRESSED GENE) AND ITS PROTE
FILE REFERENCE: 11613.29USW1
CURRENT APPLICATION NUMBER: US/09/637,746
CURRENT FILING DATE: 2000-08-11
PRIORITY APPLICATION NUMBER: PCT/US99/04142
PRIORITY FILING DATE: 1999-02-25
PRIORITY APPLICATION NUMBER: US 60/079,567
PRIORITY FILING DATE: 1998-03-27
PRIORITY APPLICATION NUMBER: US 60/075,922
PRIORITY FILING DATE: 1998-02-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-637-746-3

Query Match 100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86

RESULT 27

```
US-09-501-097A-7
; Sequence 7, Application US/09501097A
; Patent No. 6734173
; GENERAL INFORMATION:
; APPLICANT: Tzyy-Chou Wu
; APPLICANT: Chien-Fu Hung
; TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
; FILE REFERENCE: 2240-169349
; CURRENT APPLICATION NUMBER: US/09/501,097A
; CURRENT FILING DATE: 2000-02-09
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 98
; TYPE: PRT
; ORGANISM: human papillomavirus
US-09-501-097A-7
```

```
Query Match          100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TLEDLMGT 9
        |||||
        78 TLEDLMGT 86
```

```
RESULT 28
US-09-980-523A-12
; Sequence 12, Application US/09980523A
; Patent No. 6783763
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANNINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCES
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE B6 AND E7
; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
; FILE REFERENCE: MOBI AO INS
; CURRENT APPLICATION NUMBER: US/09/980,523A
; CURRENT FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: PCT/FR00/01513
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: FR 99/07012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-09-980-523A-12
```

```
Query Match          100.0%; Score 44; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TLEDLMGT 9
        |||||
        78 TLEDLMGT 86
```

```
RESULT 29
US-09-613-303-12
; Sequence 12, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
```

```
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-12
```

```
Query Match          100.0%; Score 44; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TLEDLMGT 9
        |||||
        101 TLEDLMGT 109
```

```
RESULT 30
US-10-267-311-12
; Sequence 12, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 121
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-12
```

```
Query Match          100.0%; Score 44; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 0.12;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 TLEDLMGT 9
        |||||
        101 TLEDLMGT 109
```

```
RESULT 31
US-08-860-165-14
; Sequence 14, Application US/08860165A
; Patent No. 6004557
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: FRAZER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 17227/130
; CURRENT APPLICATION NUMBER: US/08/860,165A
; CURRENT FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
```



```
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-14
```

```
Query Match          100.0%; Score 44; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 46 TLEDLMGT 54
```

```
RESULT 32
US-09-359-382-14
; Sequence 14, Application US/09359382
; Patent No. 6306397
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Stirling John
; APPLICANT: COX, John Cooper
; APPLICANT: WEBB, Elizabeth Ann
; APPLICANT: PRATER, Ian
; TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
; FILE REFERENCE: 017227/0148
; CURRENT APPLICATION NUMBER: US/09/359,382
; CURRENT FILING DATE: 1999-07-23
; EARLIER APPLICATION NUMBER: US 08/860,165
; EARLIER FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157/94
; EARLIER FILING DATE: 1994-12-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-359-382-14
```

```
Query Match          100.0%; Score 44; DB 2; Length 172;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 46 TLEDLMGT 54
```

```
RESULT 33
US-09-462-993-2
; Sequence 2, Application US/09462993
; Patent No. 6884786
; GENERAL INFORMATION:
; APPLICANT: KIENY, Marie-Paule
; APPLICANT: BALLOU, Jean-Marc
; APPLICANT: BIZOUARNE, Nadine
; TITLE OF INVENTION: ANTITUMORAL COMPOSITION BASED ON IMMUNOGENIC
; TITLE OF INVENTION: POLYPEPTIDE WITH MODIFIED CELL LOCATION
; FILE REFERENCE: 01753-122
; CURRENT APPLICATION NUMBER: US/09/462,993
; CURRENT FILING DATE: 2000-04-17
; PRIOR APPLICATION NUMBER: PCT/FR98/01576
; PRIOR FILING DATE: 1998-07-17
```

```
; PRIOR APPLICATION NUMBER: FR 97/09152
; PRIOR FILING DATE: 1997-07-18
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.2
; SEQ ID NO 2
; LENGTH: 185
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Derived from human papillomavirus, strain
; OTHER INFORMATION: HPV-16, E7 fusion signals of the rabies
; OTHER INFORMATION: glycoprotein, clone E7*TM.
US-09-462-993-2
```

```
Query Match          100.0%; Score 44; DB 2; Length 185;
Best Local Similarity 100.0%; Pred. No. 0.2;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 97 TLEDLMGT 105
```

```
RESULT 34
US-09-613-303-35
; Sequence 35, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 35
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-35
```

```
Query Match          100.0%; Score 44; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 178 TLEDLMGT 186
```

```
RESULT 35
US-10-267-311-35
; Sequence 35, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
```

```
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 35
; LENGTH: 198
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-35

Query Match          100.0%; Score 44; DB 2; Length 198;
Best Local Similarity 100.0%; Pred. No. 0.22;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
        |||||
Db      178 TLEDLMGT 186

RESULT 36
US-09-485-885-1
; Sequence 1, Application US/09485885
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabazon Silva, Teresa
; APPLICANT: Delisee, Anne-Marie Eva Fernandez
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 220
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-1

Query Match          100.0%; Score 44; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.25;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
        |||||
Db      191 TLEDLMGT 199

RESULT 37
US-09-485-885-8
; Sequence 8, Application US/09485885
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabazon Silva, Teresa
; APPLICANT: Delisee, Anne-Marie Eva Fernandez
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 8
; LENGTH: 220
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-8

Query Match          100.0%; Score 44; DB 2; Length 220;
Best Local Similarity 100.0%; Pred. No. 0.25;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
        |||||
Db      191 TLEDLMGT 199

RESULT 38
US-09-485-885-12
; Sequence 12, Application US/09485885
; Patent No. 6342224
; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabazon Silva, Teresa
; APPLICANT: Delisee, Anne-Marie Eva Fernandez
; APPLICANT: Gerard, Catherine Marie Ghislaine
; APPLICANT: Lombardo-Bencheikh, Angela
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45107
; CURRENT APPLICATION NUMBER: US/09/485,885
; CURRENT FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: PCT/EP98/05285
; PRIOR FILING DATE: 1998-08-17
; PRIOR APPLICATION NUMBER: GB 9717953.5
; PRIOR FILING DATE: 1997-08-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 239
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-12

Query Match          100.0%; Score 44; DB 2; Length 239;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
        |||||
Db      210 TLEDLMGT 218

RESULT 39
US-08-459-818-20
; Sequence 20, Application US/08459818
; Patent No. 5851795
; GENERAL INFORMATION:
; APPLICANT: Linsley, Peter S.
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Brady, William K.
; APPLICANT: Bradley, William K.
; TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 11150 Santa Monica Blvd., Suite 400
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: FastSeq 2.0
```

TOPOLGY: linear
MOLECULE TYPE: protein
US-08-889-666-20

Query Match 100.0%; Score 44; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.29;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 233 TLEDLMGT 241

RESULT 40
US-08-889-666-20
Sequence 20, Application US/08889666
Patent No. 5885579

GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 1150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/889,666
FILING DATE: 08-JUL-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:

TOPOLGY: linear
MOLECULE TYPE: protein
US-08-889-666-20

Query Match 100.0%; Score 44; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.29;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 233 TLEDLMGT 241

RESULT 41
US-08-465-078-20
Sequence 20, Application US/08465078
Patent No. 5885796

GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 1150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/465,078
FILING DATE: 05-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLGY: linear
MOLECULE TYPE: protein
US-08-465-078-20

Query Match 100.0%; Score 44; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.29;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
DB 233 TLEDLMGT 241

RESULT 42
US-08-725-776-20
Sequence 20, Application US/08725776
Patent No. 5968510

GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,776
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-725-776-20

Query Match 100.0%; Score 44; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.29;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 233 TLEDLMGT 241

RESULT 43
US-08-488-062-20
Sequence 20, Application US/08488062
Patent No. 5977318
GENERAL INFORMATION:
APPLICANT: Linsley, Peter S.
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Damle, Nitin K.
APPLICANT: Brady, William
APPLICANT: Kiener, Peter A.
TITLE OF INVENTION: CTLA4 Receptor and Uses Thereof
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 11150 Santa Monica Blvd., Suite 400
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,062
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375390
FILING DATE: 18-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Adriano, Sarah B.
REGISTRATION NUMBER: 34,470
REFERENCE/DOCKET NUMBER: 30436-35US01
TELEPHONE: 310-445-1140
TELEFAX: 310-445-9031
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-488-062-20

Query Match 100.0%; Score 44; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 0.29;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 233 TLEDLMGT 241

RESULT 44
US-08-117-083-9
Sequence 9, Application US/08117083
Patent No. 5719054
GENERAL INFORMATION:
APPLICANT: Bourneil, Michael E.
APPLICANT: Inglis, Stephen C.
APPLICANT: Munro, Alan J.
TITLE OF INVENTION: Recombinant Virus Vectors Encoding Human
NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Walter H. Dreger
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/117,083
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Walter H.
REGISTRATION NUMBER: 24,190
REFERENCE/DOCKET NUMBER: A-58783
TELEPHONE: 415-781-1989
TELEFAX: 415-398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..263
OTHER INFORMATION: /note="Xaa refers to stop codon in
OTHER INFORMATION: the open reading frame."
US-08-117-083-9

Query Match 100.0%; Score 44; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 0.3;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLLMGT 9
|||||
DB 238 TLEDLLMGT 247

RESULT 45
US-08-860-165-10
Sequence 10, Application US/08860165A
Patent No. 6004557
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PNO157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 266
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion
US-08-860-165-10

Query Match 100.0%; Score 44; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLLMGT 9
|||||
DB 238 TLEDLLMGT 246

RESULT 46
US-09-359-382-10
Sequence 10, Application US/09359382
Patent No. 6306397
GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20

EARLIER APPLICATION NUMBER: AU PNO157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-359-382-10

Query Match 100.0%; Score 44; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLLMGT 9
|||||
DB 238 TLEDLLMGT 246

RESULT 47
US-09-367-309A-1
Sequence 1, Application US/09367309A
Patent No. 6428807
GENERAL INFORMATION:
APPLICANT: MACPARLAN, RODERICK I.
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
FILE REFERENCE: 017227/0149
CURRENT APPLICATION NUMBER: US/09/367,309A
CURRENT FILING DATE: 1999-08-11
PRIOR APPLICATION NUMBER: PCT/AU96/00080
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: AU PO 5178
PRIOR FILING DATE: 1997-02-19
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-367-309A-1

Query Match 100.0%; Score 44; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLLMGT 9
|||||
DB 238 TLEDLLMGT 246

RESULT 48
US-09-501-097A-25
Sequence 25, Application US/09501097A
Patent No. 6734173
GENERAL INFORMATION:
APPLICANT: Tzzy-Chou Wu
APPLICANT: Chien-Fu Hung
TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
FILE REFERENCE: 2240-169349
CURRENT APPLICATION NUMBER: US/09/501,097A
CURRENT FILING DATE: 2000-02-09
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 25
LENGTH: 287
TYPE: PRT
ORGANISM: Human papillomavirus/Mouse
US-09-501-097A-25

Query Match 100.0%; Score 44; DB 2; Length 287;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Search completed: May 5, 2006, 07:09:47
Job time : 33.75 secs

QY 1 TLBDLNGT 9
|||
Db 267 TLBDLNGT 275

RESULT 49
US-09-613-303-33
; Sequence 33, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-33

Query Match 100.0%; Score 44; DB 2; Length 295;
Best Local Similarity 100.0%; Pred. No. 0.34;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLNGT 9
|||
Db 275 TLBDLNGT 283

RESULT 50
US-10-267-311-33
; Sequence 33, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-33

Query Match 100.0%; Score 44; DB 2; Length 295;
Best Local Similarity 100.0%; Pred. No. 0.34;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLNGT 9
|||
Db 275 TLBDLNGT 283

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocolloration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:50:57 ; Search time 57 Seconds
(without alignments)
65.973 Million cell updates/sec

Title: US-08-170-344-17
Perfect score: 44
Sequence: 1 TLEDLMGT 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Listing first 1000 summaries

Database :

- Published Applications AA Main:*
- 1: /cgn2_6/ptodata/1/pubpaa/us07_PUBCOMB.pep:*
 - 2: /cgn2_6/ptodata/1/pubpaa/us08_PUBCOMB.pep:*
 - 3: /cgn2_6/ptodata/1/pubpaa/us09_PUBCOMB.pep:*
 - 4: /cgn2_6/ptodata/1/pubpaa/us10A_PUBCOMB.pep:*
 - 5: /cgn2_6/ptodata/1/pubpaa/us10B_PUBCOMB.pep:*
 - 6: /cgn2_6/ptodata/1/pubpaa/us11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	44	100.0	9	3	US-09-891-823-6 Sequence 6, Appl1
2	44	100.0	9	4	US-10-365-908-6 Sequence 6, Appl1
3	44	100.0	9	5	US-10-871-138-6 Sequence 6, Appl1
4	44	100.0	10	3	US-09-891-823-18 Sequence 18, Appl1
5	44	100.0	10	3	US-09-891-823-42 Sequence 42, Appl1
6	44	100.0	10	4	US-10-365-908-18 Sequence 18, Appl1
7	44	100.0	10	4	US-10-365-908-12 Sequence 42, Appl1
8	44	100.0	10	5	US-10-871-138-12 Sequence 18, Appl1
9	44	100.0	10	5	US-10-871-138-42 Sequence 42, Appl1
10	44	100.0	15	4	US-10-648-547-68 Sequence 68, Appl1
11	44	100.0	15	4	US-10-648-547-75 Sequence 75, Appl1
12	44	100.0	15	4	US-10-648-547-78 Sequence 78, Appl1
13	44	100.0	15	4	US-10-648-547-79 Sequence 79, Appl1
14	44	100.0	15	4	US-10-648-547-95 Sequence 95, Appl1
15	44	100.0	15	4	US-10-476-570-50 Sequence 50, Appl1
16	44	100.0	15	4	US-10-476-570-51 Sequence 51, Appl1
17	44	100.0	15	4	US-10-306-541-56 Sequence 66, Appl1
18	44	100.0	15	4	US-10-306-541-75 Sequence 75, Appl1
19	44	100.0	15	4	US-10-306-541-78 Sequence 78, Appl1
20	44	100.0	15	4	US-10-306-541-95 Sequence 95, Appl1
21	44	100.0	20	4	US-10-432-465-55 Sequence 50, Appl1
22	44	100.0	20	5	US-10-890-526-75 Sequence 75, Appl1
23	44	100.0	20	5	US-10-890-526-75 Sequence 75, Appl1
24	44	100.0	20	5	US-10-464-063-19 Sequence 19, Appl1
25	44	100.0	21	4	US-10-432-465-51 Sequence 18, Appl1
26	44	100.0	21	4	US-10-476-570-18 Sequence 18, Appl1
27	44	100.0	21	5	US-10-890-526-76 Sequence 76, Appl1

28	44	100.0	23	4	US-10-476-570-17 Sequence 17, Appl1
29	44	100.0	98	3	US-09-728-466-1 Sequence 1, Appl1
30	44	100.0	98	3	US-09-820-165-4 Sequence 4, Appl1
31	44	100.0	98	3	US-09-824-017-4 Sequence 4, Appl1
32	44	100.0	98	3	US-09-866-118A-4 Sequence 4, Appl1
33	44	100.0	98	4	US-10-267-311-8 Sequence 8, Appl1
34	44	100.0	98	4	US-10-177-390-8 Sequence 8, Appl1
35	44	100.0	98	4	US-10-201-764-19 Sequence 19, Appl1
36	44	100.0	98	4	US-10-392-113-29 Sequence 29, Appl1
37	44	100.0	98	4	US-10-654-129-4 Sequence 4, Appl1
38	44	100.0	98	4	US-10-681-410-19 Sequence 19, Appl1
39	44	100.0	98	4	US-10-772-988-3 Sequence 3, Appl1
40	44	100.0	98	4	US-10-479-541-5 Sequence 5, Appl1
41	44	100.0	98	5	US-10-042-526A-4 Sequence 4, Appl1
42	44	100.0	98	5	US-10-657-399-1 Sequence 1, Appl1
43	44	100.0	98	5	US-10-858-384-12 Sequence 12, Appl1
44	44	100.0	98	5	US-10-484-063-26 Sequence 26, Appl1
45	44	100.0	98	5	US-10-343-448-5 Sequence 5, Appl1
46	44	100.0	98	5	US-10-679-956-8 Sequence 8, Appl1
47	44	100.0	98	5	US-10-367-057-17 Sequence 17, Appl1
48	44	100.0	98	6	US-11-077-839-5 Sequence 5, Appl1
49	44	100.0	99	4	US-10-115-440-7 Sequence 7, Appl1
50	44	100.0	111	4	US-10-472-124-4 Sequence 4, Appl1
51	44	100.0	121	4	US-10-267-311-12 Sequence 12, Appl1
52	44	100.0	121	5	US-10-679-956-12 Sequence 12, Appl1
53	44	100.0	185	6	US-11-072-488-2 Sequence 2, Appl1
54	44	100.0	198	4	US-10-267-311-35 Sequence 35, Appl1
55	44	100.0	198	5	US-10-679-956-35 Sequence 35, Appl1
56	44	100.0	220	4	US-10-000-903-1 Sequence 1, Appl1
57	44	100.0	220	4	US-10-000-903-8 Sequence 8, Appl1
58	44	100.0	220	5	US-10-899-771-1 Sequence 1, Appl1
59	44	100.0	220	5	US-10-899-771-8 Sequence 8, Appl1
60	44	100.0	229	5	US-10-000-903-12 Sequence 12, Appl1
61	44	100.0	229	5	US-10-899-771-12 Sequence 12, Appl1
62	44	100.0	266	3	US-09-567-309A-1 Sequence 1, Appl1
63	44	100.0	289	4	US-10-115-440-5 Sequence 5, Appl1
64	44	100.0	295	4	US-10-267-311-33 Sequence 33, Appl1
65	44	100.0	325	5	US-10-679-956-33 Sequence 33, Appl1
66	44	100.0	325	5	US-10-267-311-25 Sequence 25, Appl1
67	44	100.0	324	5	US-10-679-956-25 Sequence 25, Appl1
68	44	100.0	334	4	US-10-679-956-25 Sequence 25, Appl1
69	44	100.0	371	4	US-10-472-124-10 Sequence 10, Appl1
70	44	100.0	371	5	US-10-000-903-6 Sequence 6, Appl1
71	44	100.0	390	4	US-10-899-771-6 Sequence 6, Appl1
72	44	100.0	390	5	US-10-000-903-14 Sequence 14, Appl1
73	44	100.0	421	4	US-10-296-770-7 Sequence 7, Appl1
74	44	100.0	421	4	US-10-267-311-19 Sequence 19, Appl1
75	44	100.0	433	5	US-10-679-956-19 Sequence 19, Appl1
76	44	100.0	639	4	US-10-267-311-17 Sequence 17, Appl1
77	44	100.0	639	5	US-10-679-956-17 Sequence 17, Appl1
78	44	100.0	641	4	US-10-267-311-51 Sequence 51, Appl1
79	44	100.0	641	5	US-10-679-956-51 Sequence 51, Appl1
80	44	100.0	647	4	US-10-267-311-53 Sequence 53, Appl1
81	44	100.0	647	5	US-10-679-956-53 Sequence 53, Appl1
82	44	100.0	648	4	US-10-267-311-29 Sequence 29, Appl1
83	44	100.0	648	5	US-10-679-956-29 Sequence 29, Appl1
84	44	100.0	711	4	US-10-267-311-41 Sequence 41, Appl1
85	44	100.0	711	5	US-10-679-956-41 Sequence 41, Appl1
86	44	100.0	724	4	US-10-267-311-45 Sequence 45, Appl1
87	44	100.0	724	5	US-10-679-956-45 Sequence 45, Appl1
88	44	100.0	805	4	US-10-367-095-9 Sequence 9, Appl1
89	44	100.0	805	4	US-10-368-046-9 Sequence 9, Appl1
90	44	100.0	805	4	US-10-367-095-9 Sequence 9, Appl1
91	44	100.0	805	5	US-10-818-337-9 Sequence 9, Appl1
92	44	100.0	805	5	US-09-991-823-22 Sequence 22, Appl1
93	39	88.6	9	3	US-10-365-908-22 Sequence 22, Appl1
94	39	88.6	9	5	US-10-871-138-22 Sequence 22, Appl1
95	39	88.6	9	5	US-10-924-377-13 Sequence 13, Appl1
96	39	88.6	15	4	US-10-484-063-19 Sequence 97, Appl1
97	39	88.6	15	4	US-10-306-541-97 Sequence 97, Appl1
98	39	88.6	19	4	US-10-476-570-58 Sequence 58, Appl1
99	39	88.6	19	5	US-10-858-384-18 Sequence 18, Appl1
100	36	81.8	81	4	US-10-425-115-334292 Sequence 334292,

101	35	79.5	9	US-10-924-377-14	Sequence 14, Appl	174	32	72.7	250	6	US-11-089-368-38	Sequence 38, Appl
102	35	79.5	10	US-09-891-823-58	Sequence 38, Appl	175	32	72.7	254	4	US-10-207-655-288	Sequence 288, App
103	35	79.5	10	US-10-365-908-38	Sequence 38, Appl	176	32	72.7	254	5	US-10-627-556-64	Sequence 64, Appl
104	35	79.5	10	US-10-871-138-38	Sequence 38, Appl	177	32	72.7	255	5	US-10-627-556-170	Sequence 170, App
105	35	79.5	15	US-10-648-547-84	Sequence 84, Appl	178	32	72.7	259	5	US-10-220-335-662	Sequence 662, App
106	35	79.5	15	US-10-306-541-84	Sequence 199794,	179	32	72.7	306	4	US-10-425-114-51732	Sequence 51732, A
107	35	79.5	358	US-10-424-599-199794	Sequence 15752, Ap	180	32	72.7	338	4	US-10-072-012-322	Sequence 322, App
108	34	77.3	89	US-10-472-928-1752	Sequence 1752, Ap	181	32	72.7	340	5	US-10-047-542-18	Sequence 18, Appl
109	34	77.3	107	US-10-472-928-3398	Sequence 3298, Ap	182	32	72.7	340	5	US-10-872-932-33	Sequence 33, Appl
110	34	77.3	110	US-10-617-320-3226	Sequence 3226, Ap	183	32	72.7	340	5	US-10-810-881A-32	Sequence 32, Appl
111	34	77.3	129	US-10-472-928-944	Sequence 944, App	184	32	72.7	340	5	US-10-981-936-32	Sequence 32, Appl
112	34	77.3	132	US-10-472-928-1846	Sequence 1846, Ap	185	32	72.7	333	4	US-10-047-542-16	Sequence 16, Appl
113	34	77.3	132	US-10-472-928-2642	Sequence 2642, Ap	186	32	72.7	333	6	US-11-003-819-55	Sequence 55, Appl
114	34	77.3	132	US-10-617-320-2761	Sequence 2761, Ap	187	32	72.7	334	5	US-10-872-932A-32	Sequence 32, Appl
115	34	77.3	135	US-10-617-320-5643	Sequence 3643, Ap	188	32	72.7	354	5	US-10-810-881A-31	Sequence 31, Appl
116	34	77.3	167	US-10-617-320-2919	Sequence 2919, Ap	189	32	72.7	354	5	US-10-981-936-31	Sequence 31, Appl
117	34	77.3	191	US-10-617-320-2219	Sequence 3219, Ap	190	32	72.7	364	4	US-10-072-012-797	Sequence 797, App
118	34	77.3	194	US-10-617-320-4611	Sequence 4611, Ap	191	32	72.7	364	4	US-10-225-066A-848	Sequence 848, App
119	34	77.3	224	US-10-424-599-280547	Sequence 280547, Ap	192	32	72.7	366	4	US-10-374-780A-318	Sequence 318, App
120	34	77.3	236	US-10-425-115-236336	Sequence 236336, Ap	193	32	72.7	366	5	US-10-225-066A-848	Sequence 848, App
121	34	77.3	344	US-10-424-599-280548	Sequence 280548, Ap	194	32	72.7	393	4	US-10-221-945-3	Sequence 3, Appl1
122	34	77.3	346	US-10-739-930-5798	Sequence 5798, Ap	195	32	72.7	393	4	US-10-207-655-320	Sequence 320, App
123	33.5	76.1	11	US-09-891-823-39	Sequence 39, Appl	196	32	72.7	399	5	US-10-627-556-90	Sequence 90, Appl
124	33.5	76.1	11	US-10-365-908-39	Sequence 39, Appl	197	32	72.7	403	4	US-10-207-655-318	Sequence 318, App
125	33.5	76.1	11	US-10-871-138-39	Sequence 39, Appl	198	32	72.7	403	5	US-10-627-556-88	Sequence 88, Appl
126	33	75.0	9	US-09-891-823-33	Sequence 33, Appl	199	32	72.7	410	4	US-10-424-599-271035	Sequence 271035, App
127	33	75.0	9	US-09-891-823-109	Sequence 109, App	200	32	72.7	410	5	US-10-627-556-508	Sequence 508, App
128	33	75.0	9	US-10-365-908-33	Sequence 33, Appl	201	32	72.7	414	5	US-10-627-556-506	Sequence 506, App
129	33	75.0	9	US-10-365-908-109	Sequence 109, App	202	32	72.7	417	4	US-10-424-599-271037	Sequence 271037, App
130	33	75.0	9	US-10-365-908-120	Sequence 120, App	203	32	72.7	417	4	US-10-424-599-271037	Sequence 271037, App
131	33	75.0	9	US-10-871-138-83	Sequence 83, Appl	204	32	72.7	427	3	US-09-800-729-145	Sequence 145, App
132	33	75.0	9	US-10-871-138-83	Sequence 83, Appl	205	32	72.7	437	3	US-09-833-245-2194	Sequence 2194, App
133	33	75.0	9	US-10-871-138-109	Sequence 109, App	206	32	72.7	489	5	US-10-644-256-3	Sequence 3, Appl1
134	33	75.0	9	US-10-871-138-120	Sequence 120, App	207	32	72.7	491	4	US-10-104-047-3243	Sequence 3243, App
135	33	75.0	9	US-10-924-377-12	Sequence 12, Appl	208	32	72.7	491	4	US-10-108-260A-4262	Sequence 4262, App
136	33	75.0	10	US-09-891-823-137	Sequence 137, App	209	32	72.7	491	4	US-10-108-260A-4290	Sequence 4290, App
137	33	75.0	10	US-10-365-908-137	Sequence 137, App	210	32	72.7	494	4	US-09-800-729-216	Sequence 216, App
138	33	75.0	10	US-10-871-138-137	Sequence 137, App	211	32	72.7	494	4	US-10-108-260A-4078	Sequence 4078, App
139	33	75.0	11	US-09-891-823-134	Sequence 134, App	212	32	72.7	494	4	US-10-108-260A-4275	Sequence 4275, App
140	33	75.0	11	US-10-365-908-134	Sequence 134, App	213	32	72.7	494	4	US-10-072-012-798	Sequence 798, App
141	33	75.0	11	US-10-871-138-134	Sequence 134, App	214	32	72.7	495	3	US-09-833-245-302	Sequence 302, App
142	33	75.0	15	US-09-739-466C-14	Sequence 14, Appl	215	32	72.7	495	4	US-10-108-260A-4085	Sequence 4085, App
143	33	75.0	98	US-10-367-057-12	Sequence 12, Appl	216	32	72.7	495	4	US-10-108-260A-4114	Sequence 4114, App
144	33	75.0	103	US-09-738-626-3775	Sequence 3775, App	217	32	72.7	495	4	US-10-108-260A-4277	Sequence 4277, App
145	33	75.0	111	US-10-074-475-267	Sequence 267, App	218	32	72.7	496	4	US-10-104-047-3006	Sequence 3006, App
146	33	75.0	114	US-10-296-115-1051	Sequence 1051, App	219	32	72.7	496	4	US-10-108-260A-4058	Sequence 4058, App
147	33	75.0	129	US-10-472-928-8010	Sequence 4010, App	220	32	72.7	497	4	US-10-104-047-3773	Sequence 3773, App
148	33	75.0	390	US-10-282-122A-72268	Sequence 24, Appl	221	32	72.7	497	4	US-10-108-260A-4244	Sequence 4244, App
149	33	72.7	15	US-10-346-162-24	Sequence 24, Appl	222	32	72.7	500	4	US-10-108-260A-4255	Sequence 4255, App
150	32	72.7	15	US-10-656-250-144	Sequence 144, App	223	32	72.7	500	4	US-10-108-260A-4684	Sequence 4684, App
151	32	72.7	60	US-10-472-928-154	Sequence 2154, App	224	32	72.7	500	5	US-10-627-556-382	Sequence 382, App
152	32	72.7	106	US-10-282-122A-54102	Sequence 54102, A	225	32	72.7	502	4	US-10-207-655-305	Sequence 305, App
153	32	72.7	115	US-10-220-335-518	Sequence 318, App	226	32	72.7	502	4	US-10-108-260A-4245	Sequence 4245, App
154	32	72.7	139	US-10-424-599-251647	Sequence 251647, App	227	32	72.7	502	5	US-10-627-556-76	Sequence 76, Appl
155	32	72.7	172	US-10-656-053B-117	Sequence 117, App	228	32	72.7	504	4	US-10-072-012-254	Sequence 254, App
156	32	72.7	212	US-10-617-316-144	Sequence 144, App	229	32	72.7	507	5	US-10-627-556-263	Sequence 263, App
157	32	72.7	217	US-10-424-599-271036	Sequence 271036, App	230	32	72.7	508	4	US-10-104-047-3233	Sequence 3233, App
158	32	72.7	220	US-11-003-819-53	Sequence 53, Appl	231	32	72.7	508	4	US-10-108-260A-3028	Sequence 3028, App
159	32	72.7	236	US-10-207-655-303	Sequence 303, Appl	232	32	72.7	516	4	US-10-207-655-299	Sequence 299, App
160	32	72.7	236	US-10-627-556-74	Sequence 74, Appl	233	32	72.7	516	5	US-10-627-556-71	Sequence 71, Appl
161	32	72.7	236	US-10-627-556-510	Sequence 510, App	234	32	72.7	516	5	US-10-627-556-252	Sequence 252, App
162	32	72.7	241	US-10-627-556-256	Sequence 286, App	235	32	72.7	520	4	US-10-207-655-286	Sequence 286, App
163	32	72.7	250	US-10-207-655-38	Sequence 38, Appl	236	32	72.7	520	5	US-10-627-556-62	Sequence 62, Appl
164	32	72.7	250	US-10-207-655-36	Sequence 286, App	237	32	72.7	521	5	US-10-627-556-398	Sequence 398, App
165	32	72.7	250	US-10-053-530-38	Sequence 38, App	238	32	72.7	520	3	US-09-800-729-112	Sequence 112, App
166	32	72.7	250	US-10-627-556-59	Sequence 38, Appl	239	32	72.7	530	3	US-09-833-245-2189	Sequence 2189, App
167	32	72.7	250	US-11-089-511-38	Sequence 38, Appl	240	32	72.7	538	4	US-10-047-542-99	Sequence 99, Appl
168	32	72.7	250	US-11-089-190-58	Sequence 38, Appl	241	32	72.7	550	5	US-10-627-556-484	Sequence 484, App
169	32	72.7	250	US-11-088-570-58	Sequence 38, Appl	242	32	72.7	560	5	US-10-627-556-172	Sequence 172, App
170	32	72.7	250	US-11-088-737-38	Sequence 38, Appl	243	32	72.7	573	5	US-10-627-556-178	Sequence 178, App
171	32	72.7	250	US-11-088-569-38	Sequence 38, Appl	244	32	72.7	573	5	US-10-627-556-182	Sequence 182, App
172	32	72.7	250	US-11-088-693-38	Sequence 38, Appl	245	32	72.7	573	5	US-10-627-556-446	Sequence 446, App
173	32	72.7	250	US-11-089-367-38	Sequence 38, Appl	246	32	72.7	630	4	US-10-422-628-48	Sequence 48, Appl

247	32	72.7	639	4	US-10-422-628-16	Sequence 16, Appl	320	30	68.2	133	4	US-10-282-122A-64930	Sequence 64930, A
248	32	72.7	668	3	US-09-807-721-2	Sequence 2, Appl	321	30	68.2	133	4	US-10-080-170-619	Sequence 619, App
249	32	72.7	678	5	US-10-739-930-5277	Sequence 6277, Ap	322	30	68.2	133	4	US-10-468-156-619	Sequence 619, App
250	32	72.7	695	4	US-10-424-589-176182	Sequence 176182, A	323	30	68.2	137	4	US-10-425-114-5134	Sequence 51364, A
251	32	72.7	762	4	US-10-282-122A-69288	Sequence 69288, A	324	30	68.2	133	4	US-10-425-114-4118	Sequence 41138, A
252	32	72.7	799	4	US-10-047-542-8	Sequence 8, Appl	325	30	68.2	144	4	US-10-425-114-38084	Sequence 38084, A
253	32	72.7	822	4	US-10-047-542-48	Sequence 48, Appl	326	30	68.2	161	4	US-10-425-114-39592	Sequence 39592, A
254	32	72.7	979	4	US-10-369-493-22797	Sequence 22797, A	327	30	68.2	180	4	US-10-425-114-39554	Sequence 39554, A
255	32	72.7	1111	5	US-10-756-149-4901	Sequence 4901, Ap	328	30	68.2	189	4	US-10-425-114-69710	Sequence 69710, A
256	32	72.7	1141	4	US-10-741-601-557	Sequence 557, App	329	30	68.2	197	5	US-10-450-763-35214	Sequence 35214, A
257	32	72.7	1141	4	US-10-741-601-558	Sequence 558, App	330	30	68.2	201	4	US-10-424-599-188609	Sequence 188609, A
258	32	72.7	1141	5	US-10-741-600-1642	Sequence 1642, Ap	331	30	68.2	211	5	US-10-732-923-5367	Sequence 5367, Ap
259	32	72.7	1141	5	US-10-741-600-1643	Sequence 1643, Ap	332	30	68.2	211	5	US-10-495-300-18	Sequence 18, Appl
260	32	72.7	1354	6	US-11-097-143-19560	Sequence 19560, A	333	30	68.2	221	4	US-10-425-114-46535	Sequence 46535, A
261	31	70.5	84	4	US-10-424-599-245453	Sequence 245453, A	334	30	68.2	225	4	US-10-425-114-48425	Sequence 48425, A
262	31	70.5	116	4	US-10-767-701-33327	Sequence 33327, A	335	30	68.2	229	4	US-10-425-114-56927	Sequence 56927, A
263	31	70.5	133	4	US-10-029-386-32218	Sequence 32218, A	336	30	68.2	246	3	US-09-989-122-225	Sequence 225, App
264	31	70.5	210	4	US-10-451-337-2	Sequence 2, Appl	337	30	68.2	246	3	US-09-989-723-225	Sequence 225, App
265	31	70.5	210	5	US-10-474-792-508	Sequence 508, App	338	30	68.2	246	3	US-09-989-729-225	Sequence 225, App
266	31	70.5	259	5	US-10-739-930-4098	Sequence 9098, Ap	339	30	68.2	246	3	US-09-989-727-225	Sequence 225, App
267	31	70.5	290	5	US-10-739-930-5765	Sequence 5765, Ap	340	30	68.2	246	3	US-09-989-731-225	Sequence 225, App
268	31	70.5	300	3	US-09-982-616-9	Sequence 9, Appl	341	30	68.2	246	3	US-09-989-732-225	Sequence 225, App
269	31	70.5	300	3	US-09-773-307B-2	Sequence 2, Appl	342	30	68.2	246	3	US-09-991-073-225	Sequence 225, App
270	31	70.5	300	4	US-10-295-027-1348	Sequence 1348, Ap	343	30	68.2	246	3	US-09-990-442-225	Sequence 225, App
271	31	70.5	300	4	US-10-454-238-2	Sequence 2, Appl	344	30	68.2	246	3	US-09-991-163-225	Sequence 225, App
272	31	70.5	300	5	US-10-322-696-162	Sequence 162, Appl	345	30	68.2	246	3	US-09-990-456-225	Sequence 225, App
273	31	70.5	300	5	US-10-753-267-34	Sequence 34, Appl	346	30	68.2	246	3	US-09-990-456-225	Sequence 225, App
274	31	70.5	306	4	US-10-322-696-159	Sequence 159, App	347	30	68.2	246	3	US-09-992-598-225	Sequence 225, App
275	31	70.5	349	4	US-10-282-122A-55723	Sequence 55723, A	348	30	68.2	246	3	US-09-992-598-225	Sequence 225, App
276	31	70.5	407	4	US-10-369-493-8342	Sequence 8342, Ap	349	30	68.2	246	3	US-09-989-293A-225	Sequence 225, App
277	31	70.5	525	4	US-10-032-585-7150	Sequence 7150, Ap	350	30	68.2	246	3	US-09-989-735-225	Sequence 225, App
278	31	70.5	648	4	US-10-408-765A-2690	Sequence 2690, Ap	351	30	68.2	246	3	US-09-990-444-225	Sequence 225, App
279	31	70.5	688	5	US-10-450-763-37242	Sequence 37242, A	352	30	68.2	246	3	US-09-991-181-225	Sequence 225, App
280	31	70.5	760	4	US-09-285-606-2	Sequence 2, Appl	353	30	68.2	246	3	US-09-989-730-225	Sequence 225, App
281	31	70.5	760	4	US-10-177-293-136	Sequence 136, App	354	30	68.2	246	3	US-09-990-436-225	Sequence 225, App
282	31	70.5	760	4	US-10-301-822-55	Sequence 55, Appl	355	30	68.2	246	3	US-09-993-687-225	Sequence 225, App
283	31	70.5	760	5	US-10-723-860-4171	Sequence 4171, Ap	356	30	68.2	246	3	US-09-989-734-225	Sequence 225, App
284	31	70.5	771	4	US-10-884-070A-13	Sequence 13, Appl	357	30	68.2	246	3	US-09-997-653-225	Sequence 225, App
285	31	70.5	771	4	US-10-282-122A-67893	Sequence 67893, A	358	30	68.2	246	3	US-09-989-724-225	Sequence 225, App
286	31	70.5	881	4	US-10-282-122A-52384	Sequence 52384, A	359	30	68.2	246	3	US-09-989-728-225	Sequence 225, App
287	31	70.5	928	4	US-10-437-963-143553	Sequence 143553, A	360	30	68.2	246	3	US-09-990-441-225	Sequence 225, App
288	31	70.5	1016	3	US-09-738-626-4363	Sequence 4363, Ap	361	30	68.2	246	3	US-09-993-667-225	Sequence 225, App
289	31	70.5	1130	4	US-10-437-963-146398	Sequence 146398, A	362	30	68.2	246	3	US-09-997-428-225	Sequence 225, App
290	31	70.5	1677	5	US-10-450-763-40375	Sequence 40375, A	363	30	68.2	246	3	US-09-997-666-225	Sequence 225, App
291	31	70.5	1696	4	US-10-408-765A-822	Sequence 822, App	364	30	68.2	246	3	US-09-990-438-225	Sequence 225, App
292	31	70.5	1720	4	US-10-151-927-8	Sequence 8, Appl	365	30	68.2	246	3	US-09-990-562-225	Sequence 225, App
293	31	70.5	1723	5	US-10-756-149-5136	Sequence 5136, App	366	30	68.2	246	3	US-09-990-711-225	Sequence 225, App
294	31	70.5	4128	4	US-10-363-616-416	Sequence 416, App	367	30	68.2	246	3	US-09-989-726-225	Sequence 225, App
295	31	70.5	4128	5	US-10-764-425-152	Sequence 152, App	368	30	68.2	246	3	US-09-989-156-225	Sequence 225, App
296	31	70.5	4128	5	US-10-473-127-568	Sequence 568, App	369	30	68.2	246	3	US-09-990-437-225	Sequence 225, App
297	31	70.5	4128	5	US-10-473-127-573	Sequence 573, App	370	30	68.2	246	3	US-09-991-157-225	Sequence 225, App
298	31	70.5	4128	5	US-10-473-127-574	Sequence 574, App	371	30	68.2	246	3	US-09-997-514-225	Sequence 225, App
299	31	70.5	4128	5	US-10-511-561-3	Sequence 3, Appl	372	30	68.2	246	3	US-09-997-973-225	Sequence 225, App
300	30	68.2	9	5	US-10-924-377-15	Sequence 15, Appl	373	30	68.2	246	3	US-09-991-172-225	Sequence 225, App
301	30	68.2	10	3	US-09-891-823-47	Sequence 47, Appl	374	30	68.2	246	3	US-09-990-726-225	Sequence 225, App
302	30	68.2	10	4	US-10-365-908-47	Sequence 47, Appl	375	30	68.2	246	3	US-09-997-559-225	Sequence 225, App
303	30	68.2	10	5	US-10-871-138-47	Sequence 47, Appl	376	30	68.2	246	3	US-09-997-601-225	Sequence 225, App
304	30	68.2	55	4	US-10-425-115-223646	Sequence 223646, A	377	30	68.2	246	3	US-09-990-443-225	Sequence 225, App
305	30	68.2	63	4	US-10-424-599-223445	Sequence 223445, A	378	30	68.2	246	3	US-09-991-854-225	Sequence 225, App
306	30	68.2	90	4	US-10-425-114-39145	Sequence 39145, A	379	30	68.2	246	3	US-09-997-683-225	Sequence 225, App
307	30	68.2	94	4	US-10-424-599-243335	Sequence 243335, A	380	30	68.2	246	3	US-09-997-683-225	Sequence 225, App
308	30	68.2	95	4	US-10-425-114-57540	Sequence 57540, A	381	30	68.2	246	3	US-09-989-729-225	Sequence 225, App
309	30	68.2	100	4	US-10-437-963-163199	Sequence 163199, A	382	30	68.2	246	3	US-09-997-440-225	Sequence 225, App
310	30	68.2	102	4	US-10-424-599-245452	Sequence 245452, A	383	30	68.2	246	3	US-09-997-440-225	Sequence 225, App
311	30	68.2	110	4	US-10-425-114-45117	Sequence 45117, A	384	30	68.2	246	3	US-09-990-440-225	Sequence 225, App
312	30	68.2	116	4	US-10-080-170-267	Sequence 267, App	385	30	68.2	246	3	US-09-997-857-225	Sequence 225, App
313	30	68.2	116	4	US-10-282-122A-64022	Sequence 64022, A	386	30	68.2	246	3	US-09-993-469-225	Sequence 225, App
314	30	68.2	116	4	US-10-080-170-267	Sequence 267, App	387	30	68.2	246	3	US-09-997-542-225	Sequence 225, App
315	30	68.2	116	4	US-10-468-356-267	Sequence 267, App	388	30	68.2	246	3	US-09-993-748-225	Sequence 225, App
316	30	68.2	122	4	US-10-425-114-59805	Sequence 69805, A	389	30	68.2	246	3	US-09-990-439-225	Sequence 225, App
317	30	68.2	131	4	US-10-767-701-59841	Sequence 39841, A	390	30	68.2	246	3	US-09-990-427-225	Sequence 225, App
318	30	68.2	133	4	US-10-080-170-619	Sequence 619, App	391	30	68.2	246	3	US-09-989-328-225	Sequence 225, App
319	30	68.2	133	4	US-10-282-122A-62850	Sequence 62850, A	392	30	68.2	246	3	US-09-993-583-225	Sequence 225, App

393	30	68.2	246	3	US-09-941-992-225	Sequence 225, App	466	30	68.2	246	4	US-10-179-510-600	Sequence 600, App
394	30	68.2	246	3	US-09-992-531-225	Sequence 225, App	467	30	68.2	246	4	US-10-180-543-600	Sequence 600, App
395	30	68.2	246	3	US-09-997-333-225	Sequence 225, App	468	30	68.2	246	4	US-10-180-544-600	Sequence 600, App
396	30	68.2	246	3	US-09-997-384-225	Sequence 225, App	469	30	68.2	246	4	US-10-180-546-600	Sequence 600, App
397	30	68.2	246	3	US-09-998-041-225	Sequence 225, App	470	30	68.2	246	4	US-10-180-547-600	Sequence 600, App
398	30	68.2	246	3	US-09-997-585-225	Sequence 225, App	471	30	68.2	246	4	US-10-180-549-600	Sequence 600, App
399	30	68.2	246	3	US-09-997-614-225	Sequence 225, App	472	30	68.2	246	4	US-10-180-555-600	Sequence 600, App
400	30	68.2	246	3	US-09-989-862-225	Sequence 225, App	473	30	68.2	246	4	US-10-180-559-600	Sequence 600, App
401	30	68.2	246	3	US-09-997-529-225	Sequence 225, App	474	30	68.2	246	4	US-10-181-010-600	Sequence 600, App
402	30	68.2	246	3	US-09-989-725-225	Sequence 225, App	475	30	68.2	246	4	US-10-183-010-600	Sequence 600, App
403	30	68.2	246	3	US-09-991-150-225	Sequence 225, App	476	30	68.2	246	4	US-10-183-012-600	Sequence 600, App
404	30	68.2	246	3	US-09-997-641-225	Sequence 225, App	477	30	68.2	246	4	US-10-184-614-600	Sequence 600, App
405	30	68.2	246	3	US-09-989-733-225	Sequence 225, App	478	30	68.2	246	4	US-10-184-623-600	Sequence 600, App
406	30	68.2	246	3	US-09-992-643-225	Sequence 225, App	479	30	68.2	246	4	US-10-184-635-600	Sequence 600, App
407	30	68.2	246	4	US-10-052-586-600	Sequence 600, App	480	30	68.2	246	4	US-10-184-637-600	Sequence 600, App
408	30	68.2	246	4	US-10-028-072-436	Sequence 436, App	481	30	68.2	246	4	US-10-184-646-600	Sequence 600, App
409	30	68.2	246	4	US-10-174-590-600	Sequence 600, App	482	30	68.2	246	4	US-10-184-647-600	Sequence 600, App
410	30	68.2	246	4	US-10-176-758-600	Sequence 600, App	483	30	68.2	246	4	US-10-184-652-600	Sequence 600, App
411	30	68.2	246	4	US-10-175-737-600	Sequence 600, App	484	30	68.2	246	4	US-10-187-594-600	Sequence 600, App
412	30	68.2	246	4	US-10-174-581-600	Sequence 600, App	485	30	68.2	246	4	US-10-187-596-600	Sequence 600, App
413	30	68.2	246	4	US-10-176-483-600	Sequence 600, App	486	30	68.2	246	4	US-10-187-745-600	Sequence 600, App
414	30	68.2	246	4	US-10-176-749-600	Sequence 600, App	487	30	68.2	246	4	US-10-187-885-600	Sequence 600, App
415	30	68.2	246	4	US-10-176-914-600	Sequence 600, App	488	30	68.2	246	4	US-10-187-886-600	Sequence 600, App
416	30	68.2	246	4	US-10-176-915-600	Sequence 600, App	489	30	68.2	246	4	US-10-199-484-600	Sequence 600, App
417	30	68.2	246	4	US-10-140-808-436	Sequence 436, App	490	30	68.2	246	4	US-10-137-865-436	Sequence 436, App
418	30	68.2	246	4	US-10-121-049-436	Sequence 436, App	491	30	68.2	246	4	US-10-140-474-436	Sequence 436, App
419	30	68.2	246	4	US-10-173-706-600	Sequence 600, App	492	30	68.2	246	4	US-10-196-756-600	Sequence 600, App
420	30	68.2	246	4	US-10-175-738-600	Sequence 600, App	493	30	68.2	246	4	US-10-176-751-600	Sequence 600, App
42													

539	30	68.2	246	4	US-10-199-897-600	Sequence 600, App	612	30	68.2	246	4	US-10-199-105-600	Sequence 600, App
540	30	68.2	246	4	US-10-199-901-600	Sequence 600, App	613	30	68.2	246	4	US-10-199-106-600	Sequence 600, App
541	30	68.2	246	4	US-10-142-431-436	Sequence 436, App	614	30	68.2	246	4	US-10-199-110-600	Sequence 600, App
542	30	68.2	246	4	US-10-143-114-436	Sequence 436, App	615	30	68.2	246	4	US-10-199-311-600	Sequence 600, App
543	30	68.2	246	4	US-10-195-902-600	Sequence 600, App	616	30	68.2	246	4	US-10-199-314-600	Sequence 600, App
544	30	68.2	246	4	US-10-196-743-600	Sequence 600, App	617	30	68.2	246	4	US-10-199-317-600	Sequence 600, App
545	30	68.2	246	4	US-10-196-760-600	Sequence 600, App	618	30	68.2	246	4	US-10-199-665-600	Sequence 600, App
546	30	68.2	246	4	US-10-195-708-600	Sequence 600, App	619	30	68.2	246	4	US-10-199-666-600	Sequence 600, App
547	30	68.2	246	4	US-10-176-479-600	Sequence 600, App	620	30	68.2	246	4	US-10-199-669-600	Sequence 600, App
548	30	68.2	246	4	US-10-176-748-600	Sequence 600, App	621	30	68.2	246	4	US-10-201-534-600	Sequence 600, App
549	30	68.2	246	4	US-10-176-916-600	Sequence 600, App	622	30	68.2	246	4	US-10-201-770-600	Sequence 600, App
550	30	68.2	246	4	US-10-179-507-600	Sequence 600, App	623	30	68.2	246	4	US-10-201-855-600	Sequence 600, App
551	30	68.2	246	4	US-10-179-516-600	Sequence 600, App	624	30	68.2	246	4	US-10-201-856-600	Sequence 600, App
552	30	68.2	246	4	US-10-179-519-600	Sequence 600, App	625	30	68.2	246	4	US-10-202-459-600	Sequence 600, App
553	30	68.2	246	4	US-10-179-525-600	Sequence 600, App	626	30	68.2	246	4	US-10-202-470-600	Sequence 600, App
554	30	68.2	246	4	US-10-180-540-600	Sequence 600, App	627	30	68.2	246	4	US-10-202-476-600	Sequence 600, App
555	30	68.2	246	4	US-10-180-545-600	Sequence 600, App	628	30	68.2	246	4	US-10-202-934-600	Sequence 600, App
556	30	68.2	246	4	US-10-183-006-600	Sequence 600, App	629	30	68.2	246	4	US-10-202-935-600	Sequence 600, App
557	30	68.2	246	4	US-10-183-008-600	Sequence 600, App	630	30	68.2	246	4	US-10-202-936-600	Sequence 600, App
558	30	68.2	246	4	US-10-183-017-600	Sequence 600, App	631	30	68.2	246	4	US-10-202-939-600	Sequence 600, App
559	30	68.2	246	4	US-10-183-019-600	Sequence 600, App	632	30	68.2	246	4	US-10-205-504-600	Sequence 600, App
560	30	68.2	246	4	US-10-184-618-600	Sequence 600, App	633	30	68.2	246	4	US-10-205-509-600	Sequence 600, App
561	30	68.2	246	4	US-10-184-625-600	Sequence 600, App	634	30	68.2	246	4	US-10-205-895-600	Sequence 600, App
562	30	68.2	246	4	US-10-184-626-600	Sequence 600, App	635	30	68.2	246	4	US-10-205-899-600	Sequence 600, App
563	30	68.2	246	4	US-10-184-627-600	Sequence 600, App	636	30	68.2	246	4	US-10-205-900-600	Sequence 600, App
564	30	68.2	246	4	US-10-184-645-600	Sequence 600, App	637	30	68.2	246	4	US-10-205-909-600	Sequence 600, App
565	30	68.2	246	4	US-10-184-654-600	Sequence 600, App	638	30	68.2	246	4	US-10-123-262-436	Sequence 436, App
566	30	68.2	246	4	US-10-184-655-600	Sequence 600, App	639	30	68.2	246	4	US-10-143-423-436	Sequence 436, App
56													

685	30	68.2	246	4	US-10-187-738-600	Sequence 600, App	758	30	68.2	246	4	US-10-199-115-600	Sequence 600, App
686	30	68.2	246	4	US-10-187-740-600	Sequence 600, App	759	30	68.2	246	4	US-10-199-316-600	Sequence 600, App
687	30	68.2	246	4	US-10-187-883-600	Sequence 600, App	760	30	68.2	246	4	US-10-199-487-600	Sequence 600, App
688	30	68.2	246	4	US-10-194-363-600	Sequence 600, App	761	30	68.2	246	4	US-10-199-489-600	Sequence 600, App
689	30	68.2	246	4	US-10-194-460-600	Sequence 600, App	762	30	68.2	246	4	US-10-199-460-600	Sequence 600, App
690	30	68.2	246	4	US-10-194-463-600	Sequence 600, App	763	30	68.2	246	4	US-10-199-461-600	Sequence 600, App
691	30	68.2	246	4	US-10-194-484-600	Sequence 600, App	764	30	68.2	246	4	US-10-199-657-600	Sequence 600, App
692	30	68.2	246	4	US-10-195-884-600	Sequence 600, App	765	30	68.2	246	4	US-10-199-673-600	Sequence 600, App
693	30	68.2	246	4	US-10-196-744-600	Sequence 600, App	766	30	68.2	246	4	US-10-201-921-600	Sequence 600, App
694	30	68.2	246	4	US-10-196-755-600	Sequence 600, App	767	30	68.2	246	4	US-10-201-922-600	Sequence 600, App
695	30	68.2	246	4	US-10-197-704-600	Sequence 600, App	768	30	68.2	246	4	US-10-201-926-600	Sequence 600, App
696	30	68.2	246	4	US-10-197-710-600	Sequence 600, App	769	30	68.2	246	4	US-10-201-532-600	Sequence 600, App
697	30	68.2	246	4	US-10-198-758-600	Sequence 600, App	770	30	68.2	246	4	US-10-201-533-600	Sequence 600, App
698	30	68.2	246	4	US-10-198-766-600	Sequence 600, App	771	30	68.2	246	4	US-10-201-535-600	Sequence 600, App
699	30	68.2	246	4	US-10-199-304-600	Sequence 600, App	772	30	68.2	246	4	US-10-201-769-600	Sequence 600, App
700	30	68.2	246	4	US-10-199-309-600	Sequence 600, App	773	30	68.2	246	4	US-10-201-771-600	Sequence 600, App
701	30	68.2	246	4	US-10-199-313-600	Sequence 600, App	774	30	68.2	246	4	US-10-201-854-600	Sequence 600, App
702	30	68.2	246	4	US-10-199-456-600	Sequence 600, App	775	30	68.2	246	4	US-10-202-410-600	Sequence 600, App
703	30	68.2	246	4	US-10-201-329-600	Sequence 600, App	776	30	68.2	246	4	US-10-202-473-600	Sequence 600, App
704	30	68.2	246	4	US-10-202-412-600	Sequence 600, App	777	30	68.2	246	4	US-10-202-474-600	Sequence 600, App
705	30	68.2	246	4	US-10-206-919-600	Sequence 600, App	778	30	68.2	246	4	US-10-205-503-600	Sequence 600, App
706	30	68.2	246	4	US-10-206-922-600	Sequence 600, App	779	30	68.2	246	4	US-10-205-512-600	Sequence 600, App
707	30	68.2	246	4	US-10-206-924-600	Sequence 600, App	780	30	68.2	246	4	US-10-205-892-600	Sequence 600, App
708	30	68.2	246	4	US-10-206-928-600	Sequence 600, App	781	30	68.2	246	4	US-10-205-894-600	Sequence 600, App
709	30	68.2	246	4	US-10-207-914-600	Sequence 600, App	782	30	68.2	246	4	US-10-205-896-600	Sequence 600, App
710	30	68.2	246	4	US-10-207-921-600	Sequence 600, App	783	30	68.2	246	4	US-10-205-898-600	Sequence 600, App
711	30	68.2	246	4	US-10-207-922-600	Sequence 600, App	784	30	68.2	246	4	US-10-205-901-600	Sequence 600, App
712	30	68.2	246	4	US-10-208-027-600	Sequence 600, App	785	30	68.2	246	4	US-10-205-903-600	Sequence 600, App
71													

831	30	68.2	246	4	US-10-205-891-600	Sequence 600, App	904	30	68.2	246	4	US-10-131-836A-436	Sequence 436, App
832	30	68.2	246	4	US-10-206-917-600	Sequence 600, App	905	30	68.2	246	4	US-10-146-729-436	Sequence 436, App
833	30	68.2	246	4	US-10-207-923-600	Sequence 600, App	906	30	68.2	246	4	US-10-146-729-436	Sequence 436, App
834	30	68.2	246	4	US-10-207-924-600	Sequence 600, App	907	30	68.2	246	4	US-10-147-684-436	Sequence 436, App
835	30	68.2	246	4	US-10-208-028-600	Sequence 600, App	908	30	68.2	246	4	US-10-147-508-436	Sequence 436, App
836	30	68.2	246	4	US-10-121-045-436	Sequence 436, App	909	30	68.2	246	4	US-10-147-512-436	Sequence 436, App
837	30	68.2	246	4	US-10-123-282-436	Sequence 436, App	910	30	68.2	246	4	US-10-175-735-436	Sequence 436, App
838	30	68.2	246	4	US-10-123-903-436	Sequence 436, App	911	30	68.2	246	4	US-10-183-003-600	Sequence 600, App
839	30	68.2	246	4	US-10-124-819-436	Sequence 436, App	912	30	68.2	246	4	US-10-181-016-600	Sequence 600, App
840	30	68.2	246	4	US-10-124-822-436	Sequence 436, App	913	30	68.2	246	4	US-10-121-056-436	Sequence 436, App
841	30	68.2	246	4	US-10-140-925-436	Sequence 436, App	914	30	68.2	246	4	US-10-121-061-436	Sequence 436, App
842	30	68.2	246	4	US-10-160-498-436	Sequence 436, App	915	30	68.2	246	4	US-10-123-905-436	Sequence 436, App
843	30	68.2	246	4	US-10-205-904-600	Sequence 600, App	916	30	68.2	246	4	US-10-124-818-436	Sequence 436, App
844	30	68.2	246	4	US-10-124-824-436	Sequence 436, App	917	30	68.2	246	4	US-10-137-868-436	Sequence 436, App
845	30	68.2	246	4	US-10-127-825A-436	Sequence 436, App	918	30	68.2	246	4	US-10-147-492-436	Sequence 436, App
846	30	68.2	246	4	US-10-127-829A-436	Sequence 436, App	919	30	68.2	246	4	US-10-158-182-436	Sequence 436, App
847	30	68.2	246	4	US-10-127-835A-436	Sequence 436, App	920	30	68.2	246	4	US-10-173-696-600	Sequence 600, App
848	30	68.2	246	4	US-10-127-901A-436	Sequence 436, App	921	30	68.2	246	4	US-10-123-905-436	Sequence 436, App
849	30	68.2	246	4	US-10-127-901A-436	Sequence 436, App	922	30	68.2	246	4	US-10-123-907-436	Sequence 436, App
850	30	68.2	246	4	US-10-128-693A-436	Sequence 436, App	923	30	68.2	246	4	US-10-124-815-436	Sequence 436, App
851	30	68.2	246	4	US-10-131-813A-436	Sequence 436, App	924	30	68.2	246	4	US-10-125-921A-436	Sequence 436, App
852	30	68.2	246	4	US-10-131-818A-436	Sequence 436, App	925	30	68.2	246	4	US-10-125-923A-600	Sequence 600, App
853	30	68.2	246	4	US-10-131-823A-436	Sequence 436, App	926	30	68.2	246	4	US-10-127-827A-436	Sequence 436, App
854	30	68.2	246	4	US-10-131-824A-436	Sequence 436, App	927	30	68.2	246	4	US-10-127-828A-436	Sequence 436, App
855	30	68.2	246	4	US-10-131-830A-436	Sequence 436, App	928	30	68.2	246	4	US-10-127-832A-436	Sequence 436, App
856	30	68.2	246	4	US-10-131-837A-436	Sequence 436, App	929	30	68.2	246	4	US-10-127-832A-436	Sequence 436, App
857	30	68.2	246	4	US-10-137-872A-436	Sequence 436, App	930	30	68.2	246	4	US-10-127-834A-436	Sequence 436, App
858	30	68.2	246	4	US-10-147-500-436	Sequence 436, App	931	30	68.2	246	4	US-10-127-826A-436	Sequence 436, App
859	30	68.2	246	4	US-10-147-502-436	Sequence 436, App	932	30	68.2	246	4	US-10-127-827A-436	Sequence 436, App
860	30	68.2	246	4	US-10-147-515-436	Sequence 436, App	933	30	68.2	246	4	US-10-127-828A-436	Sequence 436, App
861	30	68.2	246	4	US-10-147-517-436	Sequence 436, App	934	30	68.2	246	4	US-10-127-830A-436	Sequence 436, App
862	30	68.2	246	4	US-10-147-526-436	Sequence 436, App	935	30	68.2	246	4	US-10-127-832A-436	Sequence 436, App
863	30	68.2	246	4	US-10-147-527-436	Sequence 436, App	936	30	68.2	246	4	US-10-127-833A-436	Sequence 436, App
864	30	68.2	246	4	US-10-175-753-600	Sequence 600, App	937	30	68.2	246	4	US-10-127-834A-436	Sequence 436, App
865	30	68.2	246	4	US-10-180-553-600	Sequence 600, App	938	30	68.2	246	4	US-10-127-836A-436	Sequence 436, App
866	30	68.2	246	4	US-10-201-327-600	Sequence 600, App	939	30	68.2	246	4	US-10-127-841A-436	Sequence 436, App
867	30	68.2	246	4	US-10-121-041-436	Sequence 436, App	940	30	68.2	246	4	US-10-127-844A-436	Sequence 436, App
868	30	68.2	246	4	US-10-121-043-436	Sequence 436, App	941	30	68.2	246	4	US-10-128-687A-436	Sequence 436, App
869	30	68.2	246	4	US-10-121-047-436	Sequence 436, App	942	30	68.2	246	4	US-10-128-688A-436	Sequence 436, App
870	30	68.2	246	4	US-10-121-062-600	Sequence 600, App	943	30	68.2	246	4	US-10-128-689A-436	Sequence 436, App
871	30	68.2	246	4	US-10-123-215-436	Sequence 436, App	944	30	68.2	246	4	US-10-128-694A-436	Sequence 436, App
872	30	68.2	246	4	US-10-123-902-436	Sequence 436, App	945	30	68.2	246	4	US-10-131-825A-436	Sequence 436, App
873	30	68.2	246	4	US-10-123-908-436	Sequence 436, App	946	30	68.2	246	4	US-10-176-491-600	Sequence 600, App
874	30	68.2	246	4	US-10-123-909-436	Sequence 436, App	947	30	68.2	246	4	US-10-176-979-600	Sequence 600, App
875	30	68.2	246	4	US-10-123-910-436	Sequence 436, App	948	30	68.2	246	4	US-10-187-592-600	Sequence 600, App
876	30	68.2	246	4	US-10-124-813-436	Sequence 436, App	949	30	68.2	246	4	US-10-230-417-436	Sequence 436, App
877	30	68.2	246	4	US-10-124-817-436	Sequence 436, App	950	30	68.2	246	4	US-10-131-815A-436	Sequence 436, App
878	30	68.2	246	4	US-10-125-922-436	Sequence 436, App	951	30	68.2	246	4	US-10-131-817A-436	Sequence 436, App
879	30	68.2	246	4	US-10-125-924-436	Sequence 436, App	952	30	68.2	246	4	US-10-131-821A-436	Sequence 436, App
880	30	68.2	246	4	US-10-140-860-436	Sequence 436, App	953	30	68.2	246	4	US-10-131-822A-436	Sequence 436, App
881	30	68.2	246	4	US-10-142-417-436	Sequence 436, App	954	30	68.2	246	4	US-10-131-828A-436	Sequence 436, App
882	30	68.2	246	4	US-10-147-519-436	Sequence 436, App	955	30	68.2	246	4	US-10-131-835A-436	Sequence 436, App
883	30	68.2	246	4	US-10-157-782-436	Sequence 436, App	956	30	68.2	246	4	US-10-137-864A-436	Sequence 436, App
884	30	68.2	246	4	US-10-152-395-436	Sequence 436, App	957	30	68.2	246	4	US-10-137-869A-436	Sequence 436, App
885	30	68.2	246	4	US-10-125-926A-436	Sequence 436, App	958	30	68.2	246	4	US-10-147-523-436	Sequence 436, App
886	30	68.2	246	4	US-10-125-926A-436	Sequence 436, App	959	30	68.2	246	4	US-10-158-785-436	Sequence 436, App
887	30	68.2	246	4	US-10-127-831A-436	Sequence 436, App	960	30	68.2	246	4	US-10-197-691-600	Sequence 600, App
888	30	68.2	246	4	US-10-127-837A-436	Sequence 436, App	961	30	68.2	246	4	US-10-198-771-600	Sequence 600, App
889	30	68.2	246	4	US-10-127-838A-436	Sequence 436, App	962	30	68.2	246	4	US-10-121-051-436	Sequence 436, App
890	30	68.2	246	4	US-10-127-842A-436	Sequence 436, App	963	30	68.2	246	4	US-10-174-575A-600	Sequence 600, App
891	30	68.2	246	4	US-10-127-843A-436	Sequence 436, App	964	30	68.2	246	4	US-10-179-520-600	Sequence 600, App
892	30	68.2	246	4	US-10-127-845A-436	Sequence 436, App	965	30	68.2	246	4	US-10-201-325-600	Sequence 600, App
893	30	68.2	246	4	US-10-127-846A-436	Sequence 436, App	966	30	68.2	246	4	US-10-202-941-600	Sequence 600, App
894	30	68.2	246	4	US-10-127-848A-436	Sequence 436, App	967	30	68.2	246	4	US-10-205-910-600	Sequence 600, App
895	30	68.2	246	4	US-10-127-849A-436	Sequence 436, App	968	30	68.2	246	4	US-10-121-042-436	Sequence 436, App
896	30	68.2	246	4	US-10-127-850A-436	Sequence 436, App	969	30	68.2	246	4	US-10-179-926-600	Sequence 600, App
897	30	68.2	246	4	US-10-127-851A-436	Sequence 436, App	970	30	68.2	246	4	US-10-123-912-436	Sequence 436, App
898	30	68.2	246	4	US-10-128-684A-436	Sequence 436, App	971	30	68.2	246	4	US-10-223-085-142	Sequence 142, App
899	30	68.2	246	4	US-10-128-686A-436	Sequence 436, App	972	30	68.2	246	4	US-10-173-701-600	Sequence 600, App
900	30	68.2	246	4	US-10-128-690A-436	Sequence 436, App	973	30	68.2	246	4	US-10-179-511-600	Sequence 600, App
901	30	68.2	246	4	US-10-128-691A-436	Sequence 436, App	974	30	68.2	246	4	US-10-179-518-600	Sequence 600, App
902	30	68.2	246	4	US-10-131-819A-436	Sequence 436, App	975	30	68.2	246	4	US-10-183-018-600	Sequence 600, App
903	30	68.2	246	4	US-10-131-829A-436	Sequence 436, App	976	30	68.2	246	4	US-10-184-624-600	Sequence 600, App

```
977 30 68.2 246 4 US-10-184-657-600 Sequence 600, App
979 30 68.2 246 4 US-10-192-007-436 Sequence 436, App
979 30 68.2 246 4 US-10-194-359-436 Sequence 436, App
980 30 68.2 246 4 US-10-197-701-600 Sequence 600, App
981 30 68.2 246 4 US-10-197-706-600 Sequence 600, App
982 30 68.2 246 4 US-10-201-857-600 Sequence 600, App
983 30 68.2 246 4 US-10-202-413-600 Sequence 600, App
984 30 68.2 246 4 US-10-202-938-600 Sequence 600, App
985 30 68.2 246 4 US-10-202-940-600 Sequence 600, App
986 30 68.2 246 4 US-10-205-508-600 Sequence 600, App
987 30 68.2 246 4 US-10-205-505-600 Sequence 600, App
988 30 68.2 246 4 US-10-206-918-600 Sequence 600, App
989 30 68.2 246 4 US-10-208-025-600 Sequence 600, App
990 30 68.2 246 4 US-10-223-084-142 Sequence 142, App
991 30 68.2 246 4 US-10-223-088-142 Sequence 142, App
992 30 68.2 246 4 US-10-223-090-142 Sequence 142, App
993 30 68.2 246 4 US-10-223-087-142 Sequence 142, App
994 30 68.2 246 4 US-10-198-760-600 Sequence 600, App
995 30 68.2 246 4 US-10-201-772-600 Sequence 600, App
996 30 68.2 246 4 US-10-127-847A-436 Sequence 436, App
997 30 68.2 246 4 US-10-184-613-600 Sequence 600, App
998 30 68.2 246 4 US-10-187-739-600 Sequence 600, App
999 30 68.2 246 4 US-10-206-907-600 Sequence 600, App
1000 30 68.2 246 4 US-10-223-083-142 Sequence 142, App
```

ALIGNMENTS

```
RESULT 1
US-09-891-823-6
; Sequence 6, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/09/891,823
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-891-823-6

Query Match          100.0%; Score 44; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-6

Query Match          100.0%; Score 44; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 3
US-10-871-138-6
; Sequence 6, Application US/10871138
; Publication No. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; CURRENT FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-871-138-6

Query Match          100.0%; Score 44; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 2
US-10-365-908-6
; Sequence 6, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
```

;; PRIOR APPLICATION NUMBER: US 60/214,202
;; PRIOR FILING DATE: 2000-06-26
;; NUMBER OF SEQ ID NOS: 140
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 18
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papilloma virus
US-09-891-823-18

Query Match 100.0%; Score 44; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 2 TLEDLMGT 10

RESULT 5
US-09-891-823-42
;; Sequence 42, Application US/09891823
;; Publication No..US20020110566A1
;; GENERAL INFORMATION:
;; APPLICANT: Neeffe, John R.
;; APPLICANT: Boux, Leslie J.
;; APPLICANT: Winnett, Mark T.
;; APPLICANT: Goldstone, Stephen E.
;; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
;; FILE REFERENCE: 12071-003001
;; CURRENT APPLICATION NUMBER: US/09/891,823
;; PRIOR FILING DATE: 2001-10-19
;; PRIOR APPLICATION NUMBER: US 60/214,202
;; PRIOR FILING DATE: 2000-06-26
;; NUMBER OF SEQ ID NOS: 140
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 42
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papilloma virus
US-09-891-823-42

Query Match 100.0%; Score 44; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 1 TLEDLMGT 9

RESULT 6
US-10-365-908-18
;; Sequence 18, Application US/10365908
;; Publication No. US20030170268A1
;; GENERAL INFORMATION:
;; APPLICANT: Neeffe, John R.
;; APPLICANT: Boux, Leslie J.
;; APPLICANT: Winnett, Mark T.
;; APPLICANT: Goldstone, Stephen E.
;; APPLICANT: Siegel, Marvin
;; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
;; FILE REFERENCE: 12071-003001
;; CURRENT APPLICATION NUMBER: US/10/365,908
;; PRIOR FILING DATE: 2003-02-13
;; PRIOR APPLICATION NUMBER: US/09/891,823
;; PRIOR FILING DATE: 2001-10-19
;; PRIOR APPLICATION NUMBER: US 60/214,202
;; PRIOR FILING DATE: 2000-06-26
;; NUMBER OF SEQ ID NOS: 140
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 18

;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papilloma virus
US-10-365-908-18

Query Match 100.0%; Score 44; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 2 TLEDLMGT 10

RESULT 7
US-10-365-908-42
;; Sequence 42, Application US/10365908
;; Publication No. US20030170268A1
;; GENERAL INFORMATION:
;; APPLICANT: Neeffe, John R.
;; APPLICANT: Boux, Leslie J.
;; APPLICANT: Winnett, Mark T.
;; APPLICANT: Goldstone, Stephen E.
;; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
;; FILE REFERENCE: 12071-003001
;; CURRENT APPLICATION NUMBER: US/10/365,908
;; PRIOR FILING DATE: 2003-02-13
;; PRIOR APPLICATION NUMBER: US/09/891,823
;; PRIOR FILING DATE: 2001-10-19
;; PRIOR APPLICATION NUMBER: US 60/214,202
;; PRIOR FILING DATE: 2000-06-26
;; NUMBER OF SEQ ID NOS: 140
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 42
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papilloma virus
US-10-365-908-42

Query Match 100.0%; Score 44; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 1 TLEDLMGT 9

RESULT 8
US-10-871-138-18
;; Sequence 18, Application US/10871138
;; Publication No. US20040235741A1
;; GENERAL INFORMATION:
;; APPLICANT: Neeffe, John R.
;; APPLICANT: Boux, Leslie J.
;; APPLICANT: Winnett, Mark T.
;; APPLICANT: Goldstone, Stephen E.
;; APPLICANT: Siegel, Marvin
;; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
;; FILE REFERENCE: 12071-003001
;; CURRENT APPLICATION NUMBER: US/10/871,138
;; PRIOR FILING DATE: 2004-06-18
;; PRIOR APPLICATION NUMBER: US/09/891,823
;; PRIOR FILING DATE: 2001-06-26
;; PRIOR APPLICATION NUMBER: US 60/214,202
;; PRIOR FILING DATE: 2000-06-26
;; NUMBER OF SEQ ID NOS: 140
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 18
;; LENGTH: 10
;; TYPE: PRT
;; ORGANISM: Human papilloma virus

US-10-871-138-18

Query Match 100.0%; Score 44; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
| | | | |
Db 2 TLEDLMGT 10

RESULT 9

US-10-871-138-42
; Sequence 42, Application US/10871138
; Publication No. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; CURRENT FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 42
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-871-138-42

Query Match 100.0%; Score 44; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.036;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
| | | | |
Db 1 TLEDLMGT 9

RESULT 10
US-10-648-547-68
; Sequence 68, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 68
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-68

Query Match 100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
| | | | |
Db 7 TLEDLMGT 15

RESULT 11
US-10-648-547-75
; Sequence 75, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 75
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-75

Query Match 100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
| | | | |
Db 1 TLEDLMGT 9

RESULT 12
US-10-648-547-78
; Sequence 78, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 78
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-78

Query Match 100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
| | | | |
Db 6 TLEDLMGT 14

RESULT 13
US-10-648-547-79
; Sequence 79, Application US/10648547
; Publication No. US20040147044A1


```
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; PRIOR FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: Wordperfect 8.0 for Windows
; SEQ ID NO 79
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-648-547-79
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLBDLMGT 9
Db 3 TLBDLMGT 11
```

```
RESULT 14
US-10-648-547-95
; Sequence 95, Application US/10648547
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; PRIOR FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: Wordperfect 8.0 for Windows
; SEQ ID NO 95
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-648-547-95
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLBDLMGT 9
Db 2 TLBDLMGT 10
```

```
RESULT 15
US-10-476-570-50
; Sequence 50, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: GUILLET, Jean-Gerard
; APPLICANT: POUVELE-MORATILLE, Sandra
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; TITLE OF INVENTION: papillomavirus proteins and uses thereof
```

```
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; PRIOR FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 50
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 72-86
; US-10-476-570-50
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLBDLMGT 9
Db 7 TLBDLMGT 15
```

```
RESULT 16
US-10-476-570-51
; Sequence 51, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: POUVELE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; PRIOR FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; PRIOR FILING DATE: 2001-05-04
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 51
; LENGTH: 15
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 77-91
; US-10-476-570-51
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLBDLMGT 9
Db 2 TLBDLMGT 10
```

```
RESULT 17
US-10-306-541-68
; Sequence 68, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
```

```
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 68
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-306-541-68
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLEDLMGT 9
Db 7 TLEDLMGT 15
```

```
RESULT 18
US-10-306-541-75
; Sequence 75, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 75
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-306-541-75
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLEDLMGT 9
Db 1 TLEDLMGT 9
```

```
RESULT 19
US-10-306-541-78
; Sequence 78, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 78
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-306-541-78
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLEDLMGT 9
Db 6 TLEDLMGT 14
```

```
RESULT 20
US-10-306-541-79
; Sequence 79, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 79
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-306-541-79
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLEDLMGT 9
Db 3 TLEDLMGT 11
```

```
RESULT 21
US-10-306-541-95
; Sequence 95, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; CURRENT FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 95
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-306-541-95
```

```
Query Match          100.0%; Score 44; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.057;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 TLEDLMGT 9
Db 2 TLEDLMGT 10
```

```
RESULT 22
US-10-432-465-50
; Sequence 50, Application US/10432465
; Publication No. US20040091479A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, John
; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; PRIOR FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 50
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-50

Query Match          100.0%; Score 44; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.078;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLMGT 9
Db 12 TLBDLMGT 20

RESULT 23
US-10-890-526-75
; Sequence 75; Application US/10890526
; Publication No. US20040258708A1
; GENERAL INFORMATION:
; APPLICANT: Joehmus, Ingrid
; APPLICANT: Nieland, John
; TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
; TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
; FILE REFERENCE: 50125/036001
; CURRENT APPLICATION NUMBER: US/10/890,526
; PRIOR FILING DATE: 2004-07-13
; PRIOR APPLICATION NUMBER: US/09/980,177
; PRIOR FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: PCT/EP00/05006
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: DE 19925199.1
; PRIOR FILING DATE: 1999-06-01
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 75
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-890-526-75

Query Match          100.0%; Score 44; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.078;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLMGT 9
Db 12 TLBDLMGT 20

RESULT 24
US-10-484-063-19
; Sequence 19; Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILLERMO
; APPLICANT: FOLLEN, MICHAEL
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 19
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-19

Query Match          100.0%; Score 44; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.078;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLMGT 9
Db 4 TLBDLMGT 12

RESULT 25
US-10-432-465-51
; Sequence 51; Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John
; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; PRIOR FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 51
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-51

Query Match          100.0%; Score 44; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.082;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLMGT 9
Db 1 TLBDLMGT 9

RESULT 26
US-10-476-570-18
; Sequence 18; Application US/10476570
; Publication No. US20040107064A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIER, Bernard
```

```
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILLERMO
; APPLICANT: FOLLEN, MICHAEL
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
; FILE REFERENCE: UTSC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 19
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-19

Query Match          100.0%; Score 44; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.078;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLMGT 9
Db 4 TLBDLMGT 12

RESULT 25
US-10-432-465-51
; Sequence 51; Application US/10432465
; Publication No. US20040091479A1
; GENERAL INFORMATION:
; APPLICANT: Nieland, John
; APPLICANT: Kaufmann, Andreas
; APPLICANT: Kather, Angela
; APPLICANT: Schinz, Manuela
; TITLE OF INVENTION: T-Cell Epitopes of the Papillomavirus L1
; TITLE OF INVENTION: Protein and E7 Protein and Their Use in Diagnosis and
; FILE REFERENCE: 50125/077001
; CURRENT APPLICATION NUMBER: US/10/432,465
; PRIOR FILING DATE: 2003-12-10
; PRIOR APPLICATION NUMBER: PCT/EP01/14037
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: DE 10059631.2
; PRIOR FILING DATE: 2000-12-01
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 51
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-432-465-51

Query Match          100.0%; Score 44; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.082;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLBDLMGT 9
Db 1 TLBDLMGT 9

RESULT 26
US-10-476-570-18
; Sequence 18; Application US/10476570
; Publication No. US20040107064A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIER, Bernard
```

APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
LENGTH: 21
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E7 78-98
US-10-476-570-18

Query Match 100.0%; Score 44; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.082;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 1 TLEDLMGT 9

RESULT 27
US-10-890-526-76
Sequence 76, Application US/10890526
Publication No. US20040258708A1
GENERAL INFORMATION:
APPLICANT: Jochmus, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
TITLE OF INVENTION: Therapy
FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/10/890,526
CURRENT FILING DATE: 2004-07-13
PRIOR APPLICATION NUMBER: US/09/980,177
PRIOR FILING DATE: 2002-05-02
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 76
LENGTH: 21
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-890-526-76

Query Match 100.0%; Score 44; DB 5; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.082;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 1 TLEDLMGT 9

RESULT 28
US-10-476-570-17
Sequence 17, Application US/10476570
Publication No. US20040170644A1
GENERAL INFORMATION:
APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE

APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
APPLICANT: MAILLIERE, Bernard
APPLICANT: BOURGAULT-VILLADA, Isabelle
APPLICANT: POUVELLE-MORATILLE, Sandra
APPLICANT: GUILLET, Jean-Gerard
TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
FILE REFERENCE: 45636-5071-US
CURRENT APPLICATION NUMBER: US/10/476,570
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: PCT/FR02/01533
PRIOR FILING DATE: 2002-05-03
PRIOR APPLICATION NUMBER: FR 01 05980
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 63
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 17
LENGTH: 23
TYPE: PRT
ORGANISM: artificial sequence
FEATURE:
OTHER INFORMATION: Description of the artificial sequence: peptide E7 65-87
US-10-476-570-17

Query Match 100.0%; Score 44; DB 4; Length 23;
Best Local Similarity 100.0%; Pred. No. 0.091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 14 TLEDLMGT 22

RESULT 29
US-09-728-466-1
Sequence 1, Application US/09728466
Patent No. US20010029022A1
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Manxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match 100.0%; Score 44; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 30
US-09-820-765-4
Sequence 4, Application US/09820765
Publication No. US20020039584A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28

;;
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: FOLEY & LARDNER
;; STREET: 3000 K Street, N.W.
;; CITY: Washington
;; STATE: D.C.
;; COUNTRY: U.S.A.
;; ZIP: 20007-5109
;;
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: Patentin Release #1.0, Version #1.30
;;
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/820,765
;; FILING DATE: 30-Mar-2001
;; CLASSIFICATION: <Unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 09/026,896
;; FILING DATE: 20-FEB-1998
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Sandercock, Colin G.
;; REGISTRATION NUMBER: 31,298
;; REFERENCE/DOCKET NUMBER: 37067/102
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (202) 672-5300
;; TELEFAX: (202) 672-5399
;;
;; INFORMATION FOR SEQ ID NO: 4:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 98 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;;
;; MOLECULE TYPE: protein
;;
;; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-765-4

Query Match 100.0%; Score 44; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 31
US-09-824-017-4
Sequence 4, Application US/09824017
Publication No. US20020197668A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/824,017
FILING DATE: 03-Apr-2001
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,896
FILING DATE: 1998-02-20

;;
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Sandercock, Colin G.
;; REGISTRATION NUMBER: 31,298
;; REFERENCE/DOCKET NUMBER: 37067/102
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (202) 672-5300
;; TELEFAX: (202) 672-5399
;;
;; INFORMATION FOR SEQ ID NO: 4:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 98 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;;
;; MOLECULE TYPE: protein
;;
;; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match 100.0%; Score 44; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 32
US-09-986-118A-4
Sequence 4, Application US/09986118A
Publication No. US20030021806A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. US20030021806A1-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match 100.0%; Score 44; DB 3; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 33
US-10-267-311-8
; Sequence 8, Application US/10267311
; Publication No. US20030050469A1
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; CURRENT FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 34
US-10-177-390-8
; Sequence 8, Application US/10177390
; Publication No. US20030143743A1
; GENERAL INFORMATION:
; APPLICANT: Schuler, Gerold
; APPLICANT: N.V. Antwerp Innovatiecentrum
; TITLE OF INVENTION: Improved Transfection of Eucaryotic Cells with Linear
; FILE REFERENCE: 021505wo/JH/ml
; CURRENT APPLICATION NUMBER: US/10/177,390
; CURRENT FILING DATE: 2002-06-20
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: fragment of
; OTHER INFORMATION: human papilloma virus type 16 E7 gene
US-10-177-390-8

Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 35
US-10-201-764-19
; Sequence 19, Application US/10201764
; Publication No. US2003016140A1
; GENERAL INFORMATION:
; APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
; FILE REFERENCE: TBA
; CURRENT APPLICATION NUMBER: US/10/201,764
; CURRENT FILING DATE: 2002-07-22
; PRIOR APPLICATION NUMBER: US/09/566,420
; PRIOR FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: 60/132,752
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: 60/132,750
; PRIOR FILING DATE: 1999-05-06
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type E7
US-10-201-764-19

Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 36
US-10-392-113-29
; Sequence 29, Application US/10392113
; Publication No. US20030224993A1
; GENERAL INFORMATION:
; APPLICANT: Land, Hartmut
; APPLICANT: Deleu, Laurent
; TITLE OF INVENTION: COMPOSITIONS THAT INHIBIT PROLIFERATION
; FILE REFERENCE: 21108.0005U3
; CURRENT APPLICATION NUMBER: US/10/392,113
; CURRENT FILING DATE: 2003-03-17
; PRIOR APPLICATION NUMBER: 60/365,078
; PRIOR FILING DATE: 2002-03-15
; PRIOR APPLICATION NUMBER: PCT/US01/32127
; PRIOR FILING DATE: 2001-10-15
; PRIOR APPLICATION NUMBER: 60/239,705
; PRIOR FILING DATE: 2000-10-12
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
; OTHER INFORMATION: Synthetic Construct
US-10-392-113-29

Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 37

US-10-654-129-4
; Sequence 4, Application US/10654129
; Publication No. US20040081661A1
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; HALLER, Michael
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
; FORMULATIONS AND METHODS OF USE
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/654,129
; FILING DATE: 04-Sep-2003
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/824,017
; FILING DATE: 03-Apr-2001
; APPLICATION NUMBER: 09/026,896
; FILING DATE: 1998-02-20
; ATTORNEY/AGENT INFORMATION:
; NAME: Sandercock, Colin G.
; REGISTRATION NUMBER: 31,298
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-654-129-4
Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86
RESULT 38
US-10-681-410-19
; Sequence 19, Application US/10681410
; Publication No. US20040096426A1
; GENERAL INFORMATION:
; APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
; TITLE OF INVENTION: IMMUNE RESPONSE
; FILE REFERENCE: TBA
; CURRENT APPLICATION NUMBER: US/10/681,410
; CURRENT FILING DATE: 2003-10-08
; PRIOR APPLICATION NUMBER: US/10/201,764
; PRIOR FILING DATE: 2002-07-22
; PRIOR APPLICATION NUMBER: US/09/566,420
; PRIOR FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: 60/132,752
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: 60/132,750

; PRIOR FILING DATE: 1999-05-06
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: Patent Ver. 2.0
; SEQ ID NO 19
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type E7
US-10-681-410-19
Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86
RESULT 39
US-10-772-988-3
; Sequence 3, Application US/10772988
; Publication No. US20040139485A1
; GENERAL INFORMATION:
; APPLICANT: Thorgelirsson, Snorri S.
; APPLICANT: Wolbach, Joseph T.
; APPLICANT: Zhang, Minghuang
; TITLE OF INVENTION: CDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTEIN
; TITLE OF INVENTION: PRODUCT
; FILE REFERENCE: 11613.25USW1
; CURRENT APPLICATION NUMBER: US/10/772,988
; CURRENT FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: US/09/637,746
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: PCT/US99/04142
; PRIOR FILING DATE: 1999-02-25
; PRIOR APPLICATION NUMBER: US 60/079,567
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: US 60/075,922
; PRIOR FILING DATE: 1998-02-25
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patent Ver. 3.1
; SEQ ID NO 3
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-772-988-3
Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 TLEDLMGT 9
DB 78 TLEDLMGT 86
RESULT 40
US-10-479-541-5
; Sequence 5, Application US/10479541
; Publication No. US20040151723A1
; GENERAL INFORMATION:
; APPLICANT: Kirin Beer Kabushiki Kaisha
; TITLE OF INVENTION: Novel E7 antigen epitope from human papillomavirus and
; TITLE OF INVENTION: CD4+ T cells activated thereby
; FILE REFERENCE: 137240PX
; CURRENT APPLICATION NUMBER: US/10/479,541
; CURRENT FILING DATE: 2003-12-04
; PRIOR APPLICATION NUMBER: 173803/2001
; PRIOR FILING DATE: 2001-06-08
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: Patent Ver. 2.1
; SEQ ID NO 5
; LENGTH: 98

TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-479-541-5

Query Match 100.0%; Score 44; DB 4; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLMT 9
Db 78 TLEDDLMT 86

RESULT 41
US-10-042-526A-4
Sequence 4, Application US/10042526A
Publication No. US20050031636A1
GENERAL INFORMATION:
APPLICANT: GISSMANN, et al.
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
FILE REFERENCE: 27013/38150
CURRENT APPLICATION NUMBER: US/10/042,526A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: US 09/632,286
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 08/944,368
PRIOR FILING DATE: 1997-10-06
NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.3
SEQ ID NO 4
LENGTH: 98
TYPE: PRT
ORGANISM: Human Papilloma Virus
US-10-042-526A-4

Query Match 100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLMT 9
Db 78 TLEDDLMT 86

RESULT 42
US-10-657-399-1
Sequence 1, Application US/10657399
Publication No. US20050032038A1
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/10/657,399
CURRENT FILING DATE: 2003-09-08
PRIOR APPLICATION NUMBER: US/09/728,466
PRIOR FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-10-657-399-1

Query Match 100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLMT 9
Db 78 TLEDDLMT 86

Db 78 TLEDDLMT 86

RESULT 43
US-10-858-384-12
Sequence 12, Application US/10858384
Publication No. US20050033025A1
GENERAL INFORMATION:
APPLICANT: CHOPIN, JEANNINE
APPLICANT: BOURGULT YILADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
FILE REFERENCE: 0508-1037-1
CURRENT APPLICATION NUMBER: US/10/858,384
CURRENT FILING DATE: 2004-06-02
PRIOR APPLICATION NUMBER: FR 9907012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 12
LENGTH: 98
TYPE: PRT
ORGANISM: Human Papillomavirus
US-10-858-384-12

Query Match 100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLMT 9
Db 78 TLEDDLMT 86

RESULT 44
US-10-484-063-26
Sequence 26, Application US/10484063
Publication No. US20050048467A1
GENERAL INFORMATION:
APPLICANT: SASTRY, K. JAGANNADHA
APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: FOLSEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
FILE REFERENCE: UTSC:560US
CURRENT APPLICATION NUMBER: US/10/484,063
CURRENT FILING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: PCT/US02/23198
PRIOR FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,809
PRIOR FILING DATE: 2001-07-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 26
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-484-063-26

Query Match 100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDDLMT 9
Db 78 TLEDDLMT 86

RESULT 45


```
US-10-343-448-5
; Sequence 5, Application US/10343448
; Publication No. US20050054820A1
; GENERAL INFORMATION:
; APPLICANT: WU, Tzyy-Chiou
; APPLICANT: HUNG, Chien-Fu
; TITLE OF INVENTION: MOLECULAR VACCINE LINKING AN ENDOPLASMIC RETICULUM CHAPERONE
; FILE REFERENCE: 2240-186463
; CURRENT APPLICATION NUMBER: US/10/343,448
; CURRENT FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: PCT/US01/24134
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: US 60/222,902
; PRIOR FILING DATE: 2000-08-03
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patent version 3.1
; SEQ ID NO 5
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-343-448-5

Query Match      100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      78 TLEDLMGT 86

RESULT 46
US-10-679-956-8
; Sequence 8, Application US/10679956
; Publication No. US20050089841A1
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/679,956
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-679-956-8

Query Match      100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      78 TLEDLMGT 86

RESULT 47
US-10-367-057-17
; Sequence 17, Application US/10367057
; Publication No. US20050100554A1
; GENERAL INFORMATION:
; APPLICANT: Cuthill, Scott;
```

```
; APPLICANT: Jackson, Amanda;
; APPLICANT: Lewin, David A.;
; APPLICANT: Ooi, Chuan Eng
; TITLE OF INVENTION: Complexes and Methods of Using Same
; FILE REFERENCE: 21402-559
; CURRENT APPLICATION NUMBER: US/10/367,057
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 60/256,911
; PRIOR FILING DATE: 2002-02-14
; NUMBER OF SEQ ID NOS: 198
; SOFTWARE: Curaseqlist version 0.1
; SEQ ID NO 17
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-367-057-17

Query Match      100.0%; Score 44; DB 5; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      78 TLEDLMGT 86

RESULT 48
US-11-077-939-5
; Sequence 5, Application US/11077939
; Publication No. US20050196865A1
; GENERAL INFORMATION:
; APPLICANT: Frazer, Ian Hector
; TITLE OF INVENTION: Gene Expression System Based on Codon Translation Efficiency
; FILE REFERENCE: 10338-11U1
; CURRENT APPLICATION NUMBER: US/11/077,939
; CURRENT FILING DATE: 2005-03-11
; PRIOR APPLICATION NUMBER: PCT/AU2003/001200
; PRIOR FILING DATE: 2003-09-12
; PRIOR APPLICATION NUMBER: US 60/410410
; PRIOR FILING DATE: 2002-09-13
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: Patent version 3.2
; SEQ ID NO 5
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-11-077-939-5

Query Match      100.0%; Score 44; DB 6; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.45;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TLEDLMGT 9
Db      78 TLEDLMGT 86

RESULT 49
US-10-115-440-7
; Sequence 7, Application US/10115440
; Publication No. US20040086845A1
; GENERAL INFORMATION:
; APPLICANT: WU, Tzyy-Chiou
; APPLICANT: HUNG, Chien-Fu
; TITLE OF INVENTION: SUPERIOR MOLECULAR VACCINE LINKING THE TRANSLOCATION DOMAIN OF A
; FILE REFERENCE: 02240-179934
; CURRENT APPLICATION NUMBER: US/10/115,440
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: US 60/281,003
; PRIOR FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: PCT/US00/41422
; PRIOR FILING DATE: 2000-10-20
```

; PRIOR APPLICATION NUMBER: US 09/501,097
; PRIOR FILING DATE: 2000-02-09
; PRIOR APPLICATION NUMBER: US 09/421,608
; PRIOR FILING DATE: 1999-10-20
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patent version 3.1
; SEQ ID NO 7
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus
; US-10-115-440-7

Query Match 100.0%; Score 44; DB 4; Length 99;
Best Local Similarity 100.0%; Pred. No. 0.46;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
|||
Db 78 TLEDLMGT 86

RESULT 50
US-10-472-724-4
; Sequence 4, Application US/10472724
; Publication No. US20040171806A1
; GENERAL INFORMATION:
; APPLICANT: Cid-Arregui, Angel
; APPLICANT: Zur Hausen, Harald
; TITLE OF INVENTION: Modified HPV E6 and E7 genes and proteins useful for vaccination
; FILE REFERENCE: 4121-154
; CURRENT APPLICATION NUMBER: US/10/472,724
; CURRENT FILING DATE: 2003-09-17
; PRIOR APPLICATION NUMBER: PCT/EP02/03271
; PRIOR FILING DATE: 2002-03-22
; PRIOR APPLICATION NUMBER: EP 01107271.7
; PRIOR FILING DATE: 2001-03-23
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patent version 3.2
; SEQ ID NO 4
; LENGTH: 111
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
; US-10-472-724-4

Query Match 100.0%; Score 44; DB 4; Length 111;
Best Local Similarity 100.0%; Pred. No. 0.52;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
|||
Db 83 TLEDLMGT 91

Search completed: May 5, 2006, 08:55:34
Job time : 67 sec

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:51:51 ; Search time 9 Seconds
(without alignments)
46.285 Million cell updates/sec

Title: US-08-170-344-17

Perfect score: 44

Sequence: 1 TLRLDLMGT 9

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

1: /SIDS5/ptodata/1/pubppaa/US08_NEW_PUB.pep1.*
2: /SIDS5/ptodata/1/pubppaa/US06_NEW_PUB.pep.*
3: /SIDS5/ptodata/1/pubppaa/US07_NEW_PUB.pep.*
4: /SIDS5/ptodata/1/pubppaa/US08_NEW_PUB.pep.*
5: /SIDS5/ptodata/1/pubppaa/PCT_NEW_PUB.pep.*
6: /SIDS5/ptodata/1/pubppaa/US09_NEW_PUB.pep.*
7: /SIDS5/ptodata/1/pubppaa/US09_NEW_PUB.pep1.*
8: /SIDS5/ptodata/1/pubppaa/US10_NEW_PUB.pep1.*
9: /SIDS5/ptodata/1/pubppaa/US10_NEW_PUB.pep1.*
10: /SIDS5/ptodata/1/pubppaa/US11_NEW_PUB.pep1.*
11: /SIDS5/ptodata/1/pubppaa/US60_NEW_PUB.pep1.*
12: /SIDS5/ptodata/1/pubppaa/US60_NEW_PUB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	44	100.0	15	9	US-10-530-061-1713
2	44	100.0	98	8	US-10-511-814-8
3	44	100.0	98	8	US-10-511-814-11
4	44	100.0	98	9	US-10-530-253-14
5	44	100.0	98	11	US-11-179-478-4
6	44	100.0	248	9	US-10-530-253-1
7	44	100.0	248	9	US-10-530-253-3
8	44	100.0	248	9	US-10-530-253-5
9	44	100.0	248	9	US-10-530-253-7
10	44	100.0	248	9	US-10-530-253-9
11	44	100.0	248	9	US-10-530-253-11
12	44	100.0	256	11	US-11-192-923A-2
13	39	88.6	15	9	US-10-530-061-1714
14	39	88.6	99	9	US-10-530-253-30
15	35	79.5	15	9	US-10-530-061-1747
16	35	79.5	98	9	US-10-530-253-36
17	33	75.0	15	9	US-10-530-061-1725
18	33	75.0	97	9	US-10-530-253-29
19	32	72.7	60	11	US-11-091-658-8
20	32	72.7	194	9	US-10-853-807A-57
21	32	72.7	236	11	US-11-022-289-12

22	32	72.7	326	11	US-11-188-298-21103	Sequence 21103, A
23	32	72.7	340	9	US-10-999-866-32	Sequence 32, Appl
24	32	72.7	340	9	US-10-493-909-18	Sequence 18, Appl
25	32	72.7	340	9	US-10-935-005B-63	Sequence 63, Appl
26	32	72.7	340	10	US-11-091-234A-32	Sequence 32, Appl
27	32	72.7	340	11	US-11-061-821-32	Sequence 32, Appl
28	32	72.7	353	9	US-10-493-909-16	Sequence 16, Appl
29	32	72.7	353	11	US-11-022-289-9	Sequence 9, Appl
30	32	72.7	354	9	US-10-999-866-31	Sequence 31, Appl
31	32	72.7	354	9	US-10-935-005B-62	Sequence 62, Appl
32	32	72.7	354	10	US-11-091-234A-31	Sequence 31, Appl
33	32	72.7	354	11	US-11-061-821-31	Sequence 31, Appl
34	32	72.7	487	11	US-11-264-096-2194	Sequence 2194, Ap
35	32	72.7	491	11	US-11-072-512-3243	Sequence 3243, Ap
36	32	72.7	495	11	US-11-264-096-302	Sequence 302, App
37	32	72.7	466	11	US-11-072-512-3006	Sequence 3006, Ap
38	32	72.7	497	11	US-11-072-512-3773	Sequence 3773, Ap
39	32	72.7	508	11	US-11-072-512-3323	Sequence 3233, Ap
40	32	72.7	530	11	US-11-264-096-2189	Sequence 2189, Ap
41	32	72.7	538	9	US-10-493-909-99	Sequence 99, Appl
42	32	72.7	554	11	US-11-022-289-10	Sequence 10, Appl
43	32	72.7	764	11	US-11-096-568A-28443	Sequence 28443, A
44	32	72.7	789	11	US-11-096-568A-28442	Sequence 28442, A
45	32	72.7	794	11	US-11-096-568A-28441	Sequence 28441, A
46	32	72.7	799	9	US-10-493-909-8	Sequence 8, Appl
47	32	72.7	832	9	US-10-493-909-48	Sequence 48, Appl
48	32	72.7	1141	9	US-10-985-561-1009	Sequence 1009, Ap
49	32	72.7	1141	9	US-10-985-561-1010	Sequence 1010, Ap
50	31	70.5	269	9	US-10-506-454-1211	Sequence 1211, Ap
51	31	70.5	300	11	US-11-058-924-7	Sequence 7, Appl
52	31	70.5	414	11	US-11-188-298-62408	Sequence 22408, A
53	31	70.5	755	9	US-10-467-657-6342	Sequence 6342, Ap
54	31	70.5	760	9	US-10-505-928-475	Sequence 475, Appl
55	31	70.5	760	11	US-11-186-284-55	Sequence 55, Appl
56	31	70.5	4128	9	US-10-770-726-77	Sequence 77, Appl
57	30	68.2	15	9	US-10-530-061-1715	Sequence 1715, Ap
58	30	68.2	15	9	US-10-530-061-1732	Sequence 1732, Ap
59	30	68.2	15	9	US-10-530-061-1748	Sequence 1748, Ap
60	30	68.2	99	9	US-10-530-253-34	Sequence 34, Appl
61	30	68.2	104	9	US-10-530-253-10	Sequence 40, Appl
62	30	68.2	111	9	US-10-467-657-7018	Sequence 7018, Ap
63	30	68.2	120	11	US-11-079-463-7753	Sequence 7753, Ap
64	30	68.2	219	9	US-10-523-503-16	Sequence 16, Appl
65	30	68.2	246	9	US-10-131-826A-436	Sequence 436, Appl
66	30	68.2	246	9	US-10-973-115B-436	Sequence 436, Appl
67	30	68.2	246	9	US-10-194-487-600	Sequence 600, Appl
68	30	68.2	246	9	US-10-195-883-600	Sequence 600, Appl
69	30	68.2	246	9	US-10-195-888-600	Sequence 600, Appl
70	30	68.2	246	9	US-10-195-889-600	Sequence 600, Appl
71	30	68.2	246	9	US-10-137-873A-436	Sequence 436, Appl
72	30	68.2	246	9	US-10-152-370-A-436	Sequence 436, Appl
73	30	68.2	246	11	US-11-240-769-57	Sequence 57, Appl
74	30	68.2	246	11	US-11-290-153-436	Sequence 436, Appl
75	30	68.2	286	9	US-10-506-454-1455	Sequence 1455, Ap
76	30	68.2	404	11	US-11-079-663-8858	Sequence 8858, Ap
77	30	68.2	416	11	US-11-188-298-18832	Sequence 18832, A
78	30	68.2	416	11	US-11-188-298-1245	Sequence 1245, Ap
79	30	68.2	425	11	US-11-188-298-16500	Sequence 16500, A
80	30	68.2	542	11	US-11-103-957-59	Sequence 59, Appl
81	30	68.2	542	11	US-11-103-957-76	Sequence 76, Appl
82	30	68.2	643	11	US-11-137-665-54	Sequence 54, Appl
83	30	68.2	1857	9	US-10-055-877-252	Sequence 252, Appl
84	30	68.2	2084	9	US-10-055-877-73	Sequence 73, Appl
85	30	68.2	2109	9	US-10-055-877-451	Sequence 251, Appl
86	30	68.2	2665	11	US-11-124-168A-214	Sequence 214, Appl
87	30	68.2	2665	11	US-11-124-168A-215	Sequence 215, Appl
88	29	65.9	154	11	US-11-188-298-9364	Sequence 9364, Ap
89	29	65.9	159	11	US-11-188-298-9734	Sequence 9734, Ap
90	29	65.9	159	11	US-11-188-298-14027	Sequence 14027, A
91	29	65.9	159	11	US-11-188-298-14030	Sequence 14030, A
92	29	65.9	159	11	US-11-188-298-14030	Sequence 14030, A
93	29	65.9	398	9	US-11-087-1079-7	Sequence 10797, A
94	29	65.9	433	11	US-10-467-657-5782	Sequence 5782, Ap
					US-11-188-298-7625	Sequence 7625, Ap

95	65.9	785	9	US-10-793-626-264	Sequence 264, App	168	63.6	555	11	US-11-096-568A-28250	Sequence 28250, A
96	65.9	797	11	US-11-087-099-11959	Sequence 11959, A	169	63.6	570	11	US-11-096-568A-28249	Sequence 28249, A
29	65.9	797	11	US-11-188-298-22120	Sequence 22120, A	170	63.6	573	11	US-11-150-463-2	Sequence 2, App1
98	65.9	1061	11	US-11-059-814-18	Sequence 18, App1	28	63.6	574	9	US-10-194-487-234	Sequence 234, App1
99	65.9	1236	11	US-11-188-298-12376	Sequence 12376, A	171	63.6	574	9	US-10-195-888-234	Sequence 234, App
29	65.9	1250	11	US-11-188-298-10474	Sequence 10474, A	28	63.6	574	9	US-10-195-888-234	Sequence 234, App
100	65.9	1260	11	US-11-188-298-21223	Sequence 21223, A	172	63.6	574	9	US-10-195-889-234	Sequence 234, App
101	65.9	1274	11	US-11-188-298-7555	Sequence 7555, App	173	63.6	574	9	US-11-096-568A-28248	Sequence 28248, A
102	65.9	1324	11	US-11-188-298-16219	Sequence 16219, A	175	63.6	587	11	US-11-045-004-921	Sequence 921, App
103	65.9	1434	11	US-11-188-298-16219	Sequence 16219, A	176	63.6	604	11	US-11-194-246-342	Sequence 342, App
29	65.9	2228	11	US-11-124-367A-270	Sequence 270, App	177	63.6	651	11	US-10-689-742-70	Sequence 70, App1
104	65.9	3377	11	US-11-124-367A-271	Sequence 271, App	28	63.6	672	11	US-11-188-298-11123	Sequence 11123, A
105	65.9	3841	11	US-11-124-367A-272	Sequence 272, App	178	63.6	756	11	US-10-506-454-648	Sequence 648, App
106	65.9	4590	8	US-10-505-928-569	Sequence 569, App	179	63.6	826	9	US-10-873-528-194	Sequence 194, App
107	65.9	15	9	US-10-530-061-1721	Sequence 1721, App	180	63.6	826	9	US-10-873-528-194	Sequence 194, App
108	63.6	15	9	US-10-530-061-1721	Sequence 1721, App	181	63.6	2358	11	US-11-188-298-18189	Sequence 18189, A
109	63.6	15	9	US-10-530-061-1722	Sequence 1722, App	182	63.6	2358	11	US-11-188-298-18189	Sequence 18189, A
110	63.6	15	9	US-10-530-061-1726	Sequence 1726, App	183	63.6	2371	11	US-11-188-298-7516	Sequence 7516, A
111	63.6	66	11	US-11-096-568A-24876	Sequence 24876, A	184	63.6	3487	11	US-11-087-099-9068	Sequence 9068, App
112	63.6	66	11	US-11-079-463-7059	Sequence 7059, App	28	63.6	3487	11	US-11-087-099-10423	Sequence 10423, A
113	63.6	98	9	US-10-530-253-28	Sequence 28, App1	185	63.6	3488	11	US-11-087-099-9005	Sequence 9005, App
114	63.6	102	11	US-11-096-568A-24875	Sequence 24875, A	186	63.6	82	11	US-11-188-298-12540	Sequence 12540, A
115	63.6	161	11	US-11-188-298-4643	Sequence 4643, A	187	61.4	135	9	US-10-920-580-1	Sequence 1, App11
116	63.6	161	11	US-11-188-298-8743	Sequence 8743, App	188	61.4	135	9	US-10-920-580-1	Sequence 1, App11
117	63.6	161	11	US-11-188-298-19246	Sequence 19246, A	189	61.4	135	9	US-10-920-580-3	Sequence 3, App11
118	63.6	179	11	US-11-177-987-41	Sequence 41, App1	190	61.4	151	9	US-10-920-876-3	Sequence 3, App11
119	63.6	190	11	US-11-182-016-41	Sequence 41, App1	191	61.4	151	9	US-11-188-298-431	Sequence 431, App1
120	63.6	196	11	US-11-055-822-418	Sequence 418, App1	192	61.4	159	11	US-11-177-987-40	Sequence 40, App1
121	63.6	203	11	US-11-096-568A-30022	Sequence 30022, A	193	61.4	179	11	US-09-995-493-180	Sequence 180, App
122	63.6	207	11	US-11-055-822-416	Sequence 416, App	194	61.4	210	7	US-09-978-360A-426	Sequence 426, App
123	63.6	214	11	US-11-096-568A-30021	Sequence 30021, A	195	61.4	212	9	US-10-714-887-254	Sequence 254, App
124	63.6	240	11	US-11-087-099-7482	Sequence 7482, App	196	61.4	237	9	US-11-188-298-9598	Sequence 9598, App
125	63.6	253	9	US-10-506-454-15	Sequence 15, App1	197	61.4	243	11	US-11-188-298-9598	Sequence 2568, App
126	63.6	261	11	US-11-096-568A-24141	Sequence 24141, A	198	61.4	253	11	US-11-045-004-3568	Sequence 6, App1
127	63.6	292	11	US-11-096-568A-24140	Sequence 24140, A	199	61.4	258	11	US-11-058-924-6	Sequence 83, App
128	63.6	308	11	US-11-096-568A-28932	Sequence 28932, A	200	61.4	261	11	US-11-045-004-833	Sequence 83, App
129	63.6	309	11	US-11-087-099-8647	Sequence 8647, App	201	61.4	268	11	US-11-096-568A-10744	Sequence 10744, A
130	63.6	309	11	US-11-087-099-8977	Sequence 8977, App	202	61.4	281	11	US-11-096-568A-31449	Sequence 31449, A
131	63.6	309	11	US-11-045-004-1737	Sequence 1737, App	203	61.4	282	11	US-11-058-924-9	Sequence 9, App11
132	63.6	330	11	US-11-096-568A-16062	Sequence 16062, A	204	61.4	282	11	US-11-096-568A-31448	Sequence 31448, A
133	63.6	330	11	US-11-188-298-7323	Sequence 7323, App	205	61.4	287	11	US-11-096-568A-31447	Sequence 31447, A
134	63.6	330	11	US-11-188-298-14287	Sequence 14287, A	206	61.4	293	9	US-10-784-004-368	Sequence 368, App
135	63.6	334	9	US-10-506-454-1367	Sequence 1367, App	207	61.4	293	9	US-10-784-004-368	Sequence 689, App
136	63.6	336	11	US-11-096-568A-16061	Sequence 16061, A	208	61.4	325	11	US-11-087-099-2362	Sequence 2362, App
137	63.6	338	11	US-11-096-568A-21865	Sequence 21865, A	209	61.4	330	11	US-11-055-822-202	Sequence 202, App
138	63.6	339	11	US-11-096-568A-28931	Sequence 28931, A	210	61.4	330	11	US-11-239-674-66	Sequence 86, App1
139	63.6	340	11	US-11-087-099-1214	Sequence 1214, App	211	61.4	334	11	US-11-079-463-6608	Sequence 6608, App
140	63.6	340	11	US-11-087-099-11439	Sequence 11439, A	212	61.4	340	11	US-11-129-143-43	Sequence 43, App1
141	63.6	359	11	US-11-188-298-15282	Sequence 15282, A	213	61.4	353	11	US-11-129-143-54	Sequence 54, App1
142	63.6	373	11	US-11-082-389-248	Sequence 248, App	214	61.4	353	11	US-11-129-143-55	Sequence 55, App1
143	63.6	382	11	US-11-188-298-9063	Sequence 9063, App	215	61.4	358	11	US-11-188-298-9149	Sequence 9149, App
144	63.6	385	11	US-11-079-463-5941	Sequence 5941, App	216	61.4	358	11	US-11-188-298-15909	Sequence 15909, A
145	63.6	390	11	US-11-188-298-21387	Sequence 21387, A	217	61.4	364	11	US-11-079-463-7573	Sequence 7573, App
146	63.6	391	11	US-11-188-298-22130	Sequence 22130, A	218	61.4	382	11	US-11-188-298-3377	Sequence 3377, App
147	63.6	396	11	US-11-079-463-5477	Sequence 5477, App	219	61.4	388	11	US-11-188-298-6391	Sequence 6391, App
148	63.6	397	9	US-10-485-517-172	Sequence 172, App	220	61.4	388	11	US-11-188-298-8165	Sequence 8165, App
149	63.6	398	11	US-11-190-188-5	Sequence 5, App1	221	61.4	388	11	US-11-188-298-12181	Sequence 12181, A
150	63.6	402	11	US-11-096-568A-24244	Sequence 24244, A	222	61.4	397	9	US-10-878-556A-155	Sequence 155, App
151	63.6	407	11	US-11-096-568A-14655	Sequence 14655, A	223	61.4	398	9	US-10-915-002-311	Sequence 311, App
152	63.6	412	11	US-11-096-568A-21864	Sequence 21864, A	224	61.4	398	11	US-11-188-298-4761	Sequence 4761, App
153	63.6	419	11	US-11-096-568A-21864	Sequence 21864, A	225	61.4	399	9	US-10-467-675-7478	Sequence 7478, App
154	63.6	435	11	US-11-188-298-17321	Sequence 17321, A	226	61.4	404	11	US-11-096-568A-32947	Sequence 32947, A
155	63.6	437	11	US-11-188-298-2824	Sequence 2824, App	227	61.4	404	11	US-11-096-568A-32946	Sequence 32946, A
156	63.6	440	11	US-11-188-298-6883	Sequence 6883, App	228	61.4	409	11	US-11-096-568A-32946	Sequence 495, App
157	63.6	440	9	US-10-821-234-1330	Sequence 1330, App	229	61.4	410	11	US-11-222-869-495	Sequence 3414, A
158	63.6	448	11	US-11-096-568A-24139	Sequence 24139, A	230	61.4	422	11	US-11-096-568A-34314	Sequence 34314, A
159	63.6	463	11	US-11-188-298-5123	Sequence 5123, App	231	61.4	425	11	US-11-096-568A-13362	Sequence 13362, App
160	63.6	463	11	US-11-188-298-5123	Sequence 5123, App	232	61.4	428	11	US-11-188-298-5202	Sequence 5202, App
161	63.6	474	11	US-11-096-568A-21863	Sequence 21863, App	233	61.4	428	11	US-11-188-298-6425	Sequence 6425, App
162	63.6	494	11	US-11-188-298-13170	Sequence 13170, App	234	61.4	429	11	US-11-188-298-11557	Sequence 11557, App
163	63.6	495	11	US-11-188-298-2632	Sequence 2632, App	235	61.4	429	11	US-11-188-298-3227	Sequence 3227, App
164	63.6	517	9	US-10-506-454-1083	Sequence 1083, App	236	61.4	429	11	US-11-188-298-16642	Sequence 16642, App
165	63.6	542	9	US-10-506-454-1262	Sequence 1262, App	237	61.4	431	11	US-11-188-298-17983	Sequence 17983, App
166	63.6	543	11	US-11-096-568A-24242	Sequence 24242, A	238	61.4	431	11	US-11-188-298-3021	Sequence 3021, App
167	63.6	543	11	US-11-096-568A-24242	Sequence 24242, A	239	61.4	431	11	US-11-188-298-3021	Sequence 3021, App
						240	61.4	431	11	US-11-188-298-18183	Sequence 18183, A

241	27	61.4	432	11	US-11-188-298-12867	Sequence 12867, A	314	26	59.1	160	11	US-11-096-568A-25157	Sequence 25157, A
242	27	61.4	432	11	US-11-188-298-14775	Sequence 14775, A	315	26	59.1	160	11	US-11-079-463-8967	Sequence 8967, Ap
243	27	61.4	433	11	US-11-188-298-8395	Sequence 8395, Ap	316	26	59.1	160	11	US-11-087-099-7391	Sequence 7391, Ap
244	27	61.4	433	11	US-11-188-298-11024	Sequence 11024, A	317	26	59.1	190	11	US-11-055-822-958	Sequence 958, App
245	27	61.4	433	11	US-11-188-298-11431	Sequence 11431, A	318	26	59.1	194	11	US-11-079-463-9110	Sequence 9110, Ap
246	27	61.4	433	11	US-11-188-298-15397	Sequence 15397, A	319	26	59.1	198	11	US-11-045-004-1180	Sequence 1180, Ap
247	27	61.4	433	11	US-11-188-298-20148	Sequence 20148, A	320	26	59.1	220	11	US-11-096-568A-24361	Sequence 24361, A
248	27	61.4	436	11	US-11-188-298-5409	Sequence 5409, Ap	321	26	59.1	224	11	US-11-087-099-1843	Sequence 1843, Ap
249	27	61.4	436	11	US-11-188-298-19770	Sequence 19770, A	322	26	59.1	227	11	US-11-087-099-5730	Sequence 5730, Ap
250	27	61.4	437	11	US-11-188-298-10027	Sequence 10027, A	323	26	59.1	239	9	US-10-467-657-5632	Sequence 5632, Ap
251	27	61.4	446	11	US-11-079-463-6726	Sequence 6726, Ap	324	26	59.1	241	11	US-11-264-096-1594	Sequence 1594, Ap
252	27	61.4	446	11	US-11-079-463-8592	Sequence 8592, Ap	325	26	59.1	254	9	US-10-485-517-208	Sequence 208, App
253	27	61.4	456	11	US-11-096-568A-32945	Sequence 32945, A	326	26	59.1	254	11	US-11-087-099-1310	Sequence 1210, Ap
254	27	61.4	469	11	US-11-096-568A-34313	Sequence 34313, A	327	26	59.1	228	11	US-11-087-099-3254	Sequence 3254, Ap
255	27	61.4	478	9	US-10-873-528-55	Sequence 55, App1	328	26	59.1	221	11	US-11-096-568A-29403	Sequence 29403, A
256	27	61.4	484	11	US-11-172-740-1301	Sequence 1301, Ap	329	26	59.1	222	11	US-11-102-883-22	Sequence 22, App1
257	27	61.4	490	11	US-11-096-568A-34312	Sequence 34312, A	330	26	59.1	232	11	US-11-102-883-24	Sequence 1174, Ap
258	27	61.4	490	11	US-11-172-740-1300	Sequence 1300, Ap	331	26	59.1	306	11	US-11-264-096-1601	Sequence 1601, A
259	27	61.4	510	9	US-10-242-586-18	Sequence 18, App1	332	26	59.1	306	11	US-11-096-568-10431	Sequence 10431, A
260	27	61.4	510	9	US-10-242-902-18	Sequence 18, App1	333	26	59.1	321	11	US-11-188-298-17696	Sequence 17696, A
261	27	61.4	510	9	US-10-243-116-18	Sequence 18, App1	334	26	59.1	333	11	US-11-188-298-10242	Sequence 10242, A
262	27	61.4	510	9	US-10-243-136-18	Sequence 18, App1	335	26	59.1	334	11	US-11-087-099-8386	Sequence 8386, Ap
263	27	61.4	510	9	US-10-243-189-18	Sequence 18, App1	336	26	59.1	336	11	US-11-087-099-1395	Sequence 1395, Ap
264	27	61.4	510	9	US-10-243-215-18	Sequence 18, App1	337	26	59.1	340	11	US-11-264-096-15572	Sequence 15572, A
265	27	61.4	510	9	US-10-243-236-18	Sequence 18, App1	338	26	59.1	343	11	US-11-096-568A-15572	Sequence 8668, Ap
266	27	61.4	510	9	US-10-243-298-18	Sequence 18, App1	339	26	59.1	343	11	US-11-079-463-8668	Sequence 8668, Ap
267	27	61.4	510	9	US-10-243-304-18	Sequence 18, App1	340	26	59.1	345	9	US-10-131-826A-286	Sequence 286, App
268	27	61.4	510	9	US-10-243-338-18	Sequence 18, App1	341	26	59.1	345	9	US-10-921-793-72	Sequence 72, App1
269	27	61.4	510	9	US-10-243-345-18	Sequence 18, App1	342	26	59.1	345	9	US-10-973-1158-286	Sequence 286, App
270	27	61.4	510	9	US-10-243-357-18	Sequence 18, App1	343	26	59.1	345	9	US-10-931-198-72	Sequence 72, App1
271	27	61.4	510	9	US-10-245-083-18	Sequence 18, App1	344	26	59.1	345	9	US-10-942-042-72	Sequence 72, App1
272	27	61.4	510	9	US-10-247-015-18	Sequence 18, App1	345	26	59.1	345	9	US-10-216-61A-488	Sequence 488, App
273	27	61.4	524	9	US-10-793-626-3090	Sequence 3090, Ap	346	26	59.1	345	9	US-10-137-873A-286	Sequence 286, App
274	27	61.4	534	9	US-10-793-626-920	Sequence 920, App	347	26	59.1	345	9	US-10-152-370-286	Sequence 286, App
275	27	61.4	544	9	US-10-793-626-3220	Sequence 3220, Ap	348	26	59.1	345	11	US-11-073-605-6	Sequence 6, App1
276	27	61.4	564	11	US-11-212-443-110	Sequence 110, App	349	26	59.1	345	11	US-11-064-774A-149	Sequence 149, App
277	27	61.4	592	11	US-10-330-773-465	Sequence 465, App	350	26	59.1	345	11	US-11-075-400-12	Sequence 12, App1
278	27	61.4	608	11	US-11-079-463-7066	Sequence 7066, Ap	351	26	59.1	345	11	US-11-075-427-22	Sequence 22, App1
279	27	61.4	624	11	US-11-098-686-10774	Sequence 10774, A	352	26	59.1	345	11	US-11-072-175-193	Sequence 193, App
280	27	61.4	629	9	US-10-821-234-1528	Sequence 1528, Ap	353	26	59.1	345	11	US-11-075-047A-103	Sequence 103, App
281	27	61.4	658	11	US-11-079-463-5947	Sequence 6947, Ap	354	26	59.1	345	11	US-11-140-284-32	Sequence 32, App1
282	27	61.4	686	11	US-11-096-568A-31237	Sequence 31237, A	355	26	59.1	345	11	US-11-290-153-286	Sequence 286, App
283	27	61.4	691	11	US-11-098-686-10746	Sequence 10746, A	356	26	59.1	349	9	US-10-485-517-117	Sequence 417, App
284	27	61.4	698	9	US-10-506-454-70	Sequence 70, App1	357	26	59.1	352	11	US-11-096-568A-15571	Sequence 15571, A
285	27	61.4	706	11	US-11-096-568A-31236	Sequence 31236, A	358	26	59.1	353	11	US-11-045-004-2185	Sequence 2185, Ap
286	27	61.4	734	11	US-11-096-568A-31235	Sequence 31235, A	359	26	59.1	354	8	US-10-511-455-85	Sequence 65, App1
287	27	61.4	761	11	US-11-188-298-18066	Sequence 18066, A	360	26	59.1	354	9	US-10-467-657-6970	Sequence 6970, Ap
288	27	61.4	873	11	US-11-096-568A-28140	Sequence 28140, A	361	26	59.1	359	9	US-10-055-877-159	Sequence 159, App
289	27	61.4	886	9	US-10-821-234-1390	Sequence 1390, Ap	362	26	59.1	360	11	US-11-045-004-2063	Sequence 2063, Ap
290	27	61.4	1049	8	US-10-505-928-759	Sequence 759, App	363	26	59.1	363	11	US-11-079-463-9740	Sequence 9740, Ap
291	27	61.4	1263	11	US-11-087-099-7209	Sequence 7209, Ap	364	26	59.1	367	11	US-11-096-568A-11577	Sequence 11577, A
292	27	61.4	1268	11	US-11-188-298-9469	Sequence 9469, Ap	365	26	59.1	369	11	US-11-096-568A-20666	Sequence 20666, A
293	27	61.4	1294	11	US-11-188-298-9622	Sequence 9622, Ap	366	26	59.1	375	11	US-11-096-568A-20666	Sequence 4639, Ap
294	27	61.4	1565	11	US-11-188-298-7537	Sequence 7537, Ap	367	26	59.1	375	11	US-11-188-298-20720	Sequence 20720, A
295	27	61.4	261	9	US-10-878-556A-180	Sequence 180, App	368	26	59.1	378	11	US-11-172-424-1335	Sequence 1335, Ap
296	26.5	60.2	501	11	US-11-045-004-1802	Sequence 1802, Ap	369	26	59.1	379	7	US-09-978-360A-506	Sequence 506, App
297	26	59.1	16	9	US-10-498-026-12	Sequence 12, App1	370	26	59.1	380	11	US-11-096-568A-11576	Sequence 11576, A
298	26	59.1	16	11	US-11-033-039-187	Sequence 187, App	371	26	59.1	391	11	US-11-058-127-119	Sequence 11576, A
299	26	59.1	23	11	US-11-038-501-12	Sequence 12, App1	372	26	59.1	391	11	US-11-058-127-121	Sequence 121, App
300	26	59.1	23	11	US-11-059-633-15	Sequence 15, App1	373	26	59.1	391	11	US-11-058-127-123	Sequence 123, App
301	26	59.1	78	11	US-11-079-463-8039	Sequence 8039, Ap	374	26	59.1	391	11	US-11-108-189-119	Sequence 119, App
302	26	59.1	81	11	US-11-096-568A-21137	Sequence 21137, A	375	26	59.1	391	11	US-11-108-389-121	Sequence 123, App
303	26	59.1	98	9	US-10-928-446A-140	Sequence 140, App	376	26	59.1	391	11	US-11-204-889-119	Sequence 119, App
304	26	59.1	105	11	US-11-000-443-818	Sequence 818, App	377	26	59.1	391	11	US-11-224-824-121	Sequence 123, App
305	26	59.1	108	11	US-11-096-568A-21135	Sequence 21135, A	378	26	59.1	391	11	US-11-224-824-123	Sequence 123, App
306	26	59.1	109	9	US-10-498-026-26	Sequence 26, App1	379	26	59.1	391	11	US-11-087-099-11242	Sequence 11242, A
307	26	59.1	109	11	US-11-033-039-136	Sequence 136, App	380	26	59.1	391	11	US-11-188-298-21372	Sequence 21372, App
308	26	59.1	118	11	US-11-188-298-21864	Sequence 21864, A	381	26	59.1	401	9	US-10-506-454-122	Sequence 722, App
309	26	59.1	127	11	US-11-045-004-957	Sequence 957, App	382	26	59.1	402	11	US-11-188-298-21685	Sequence 21685, A
310	26	59.1	129	11	US-11-096-568A-25158	Sequence 25158, A	383	26	59.1	404	11	US-11-018-868-43	Sequence 43, App1
311	26	59.1	133	9	US-11-098-686-10330	Sequence 10330, A	384	26	59.1	408	11	US-11-232-005A-36	Sequence 36, App1
312	26	59.1	139	11	US-10-793-626-2992	Sequence 2992, Ap	385	26	59.1	408	11	US-11-096-568A-29402	Sequence 29402, A
313	26	59.1	154	11	US-11-188-298-2288	Sequence 2288, Ap	386	26	59.1	408	11	US-11-096-568A-29402	Sequence 29402, A

387	26	59.1	413	11	US-11-087-099-4974	Sequence 4974, Ap	460	25.5	58.0	257	11	US-11-188-298-11020	Sequence 11020, A
388	26	59.1	416	11	US-11-188-298-7491	Sequence 7491, Ap	461	25.5	58.0	316	11	US-11-188-298-16788	Sequence 16788, A
389	26	59.1	417	11	US-11-188-298-5561	Sequence 5561, Ap	462	25.5	58.0	341	11	US-11-188-298-6689	Sequence 6689, Ap
390	26	59.1	419	11	US-11-288-493-38	Sequence 38, Appl	463	25.5	58.0	341	11	US-11-188-298-12534	Sequence 12534, A
391	26	59.1	421	11	US-11-096-568A-23947	Sequence 23947, A	464	25.5	58.0	356	11	US-11-126-344-3	Sequence 3, Appl
392	26	59.1	424	11	US-11-188-298-5330	Sequence 5330, Ap	465	25	56.8	15	9	US-10-530-061-1733	Sequence 1733, Appl
393	26	59.1	426	11	US-11-096-568A-29401	Sequence 29401, A	466	25	56.8	87	11	US-11-188-298-17445	Sequence 17445, A
394	26	59.1	429	11	US-11-188-298-2336	Sequence 2336, Ap	467	25	56.8	88	11	US-11-004-399-2744	Sequence 2744, Ap
395	26	59.1	433	11	US-11-146-428-76	Sequence 76, Appl	468	25	56.8	90	11	US-11-188-298-16231	Sequence 16231, A
396	26	59.1	437	11	US-11-096-568A-11575	Sequence 11575, A	469	25	56.8	102	11	US-11-188-298-11869	Sequence 11869, A
397	26	59.1	443	11	US-11-188-298-15190	Sequence 15190, A	470	25	56.8	103	11	US-11-188-298-21516	Sequence 21516, A
398	26	59.1	452	11	US-11-045-004-445	Sequence 445, App	471	25	56.8	105	11	US-11-264-096-2262	Sequence 2262, Ap
399	26	59.1	453	9	US-10-467-657-206	Sequence 206, App	472	25	56.8	107	11	US-11-188-298-7438	Sequence 7438, Ap
400	26	59.1	453	9	US-10-467-657-3626	Sequence 3626, Ap	473	25	56.8	115	11	US-11-194-890-4	Sequence 4, Appl
401	26	59.1	453	9	US-10-467-657-6400	Sequence 6400, A	474	25	56.8	117	11	US-11-188-298-2401	Sequence 2401, Ap
402	26	59.1	454	11	US-11-096-568A-31074	Sequence 31074, A	475	25	56.8	118	9	US-10-467-657-4296	Sequence 4296, Ap
403	26	59.1	455	11	US-11-072-512-3818	Sequence 3818, Ap	476	25	56.8	119	11	US-11-188-298-2447	Sequence 2447, Ap
404	26	59.1	461	11	US-11-188-298-11399	Sequence 11399, A	477	25	56.8	123	9	US-10-131-826A-402	Sequence 402, App
405	26	59.1	468	9	US-10-467-657-2274	Sequence 2274, Ap	478	25	56.8	123	9	US-10-973-115B-402	Sequence 402, App
406	26	59.1	473	11	US-11-096-568A-28682	Sequence 28682, Ap	479	25	56.8	123	9	US-10-137-873A-402	Sequence 402, App
407	26	59.1	473	11	US-11-096-568A-31073	Sequence 31073, A	480	25	56.8	123	9	US-10-152-370-402	Sequence 402, App
408	26	59.1	477	9	US-10-784-004-643	Sequence 643, App	481	25	56.8	124	11	US-11-290-153-402	Sequence 402, App
409	26	59.1	477	9	US-10-784-004-693	Sequence 693, App	482	25	56.8	124	11	US-11-031-206-8	Sequence 8, Appl
410	26	59.1	477	9	US-10-784-004-1047	Sequence 1047, Ap	483	25	56.8	127	11	US-11-019-711-54	Sequence 54, Appl
411	26	59.1	477	9	US-10-784-004-1075	Sequence 1075, Ap	484	25	56.8	130	11	US-11-188-298-61193	Sequence 61193, Ap
412	26	59.1	480	11	US-11-172-740-2309	Sequence 2309, Ap	485	25	56.8	131	11	US-11-188-298-11115	Sequence 11115, A
413	26	59.1	483	9	US-10-934-944-156	Sequence 156, App	486	25	56.8	135	11	US-11-188-298-15998	Sequence 15998, A
414	26	59.1	483	9	US-11-116-881A-165	Sequence 165, App	487	25	56.8	137	11	US-11-045-004-1233	Sequence 1233, Ap
415	26	59.1	519	11	US-11-188-298-7379	Sequence 7379, Ap	488	25	56.8	140	11	US-11-045-004-1658	Sequence 1658, Ap
416	26	59.1	519	11	US-11-188-298-10418	Sequence 10418, A	489	25	56.8	141	9	US-10-714-887-76	Sequence 76, Appl
417	26	59.1	550	9	US-10-091-342-2	Sequence 2, Appl	490	25	56.8	144	11	US-11-188-298-17948	Sequence 17948, A
418	26	59.1	551	11	US-11-000-463-346	Sequence 346, App	491	25	56.8	145	9	US-10-703-799B-94	Sequence 94, Appl
419	26	59.1	553	11	US-11-188-298-13417	Sequence 13417, A	492	25	56.8	147	9	US-10-467-657-7446	Sequence 7446, Ap
420	26	59.1	570	11	US-11-096-568A-28681	Sequence 28681, A	493	25	56.8	155	11	US-11-096-568A-310459	Sequence 310459, A
421	26	59.1	570	11	US-11-096-568A-31072	Sequence 31072, A	494	25	56.8	158	11	US-11-188-298-1124	Sequence 1124, Ap
422	26	59.1	584	9	US-10-793-626-2832	Sequence 2832, Ap	495	25	56.8	150	11	US-11-188-298-13438	Sequence 13438, A
423	26	59.1	589	11	US-11-096-568A-28680	Sequence 28680, A	496	25	56.8	152	11	US-11-188-298-19396	Sequence 19396, A
424	26	59.1	600	8	US-10-370-959-155	Sequence 155, App	497	25	56.8	155	9	US-10-793-626-308	Sequence 308, App
425	26	59.1	658	9	US-10-506-454-536	Sequence 536, App	498	25	56.8	155	11	US-11-045-004-779	Sequence 779, App
426	26	59.1	658	9	US-10-517-310-2	Sequence 2, Appl	499	25	56.8	156	11	US-11-188-298-18341	Sequence 18341, Ap
427	26	59.1	655	11	US-11-184-860-1	Sequence 1, Appl	500	25	56.8	157	11	US-11-096-568A-30459	Sequence 30459, A
428	26	59.1	655	11	US-11-124-368A-296	Sequence 296, App	501	25	56.8	158	11	US-11-188-298-982	Sequence 982, App
429	26	59.1	655	11	US-11-124-368A-297	Sequence 297, App	502	25	56.8	159	11	US-11-188-298-8836	Sequence 8836, Ap
430	26	59.1	660	11	US-11-188-298-4604	Sequence 4604, Ap	503	25	56.8	160	11	US-11-096-568A-7877	Sequence 7877, Ap
431	26	59.1	660	11	US-11-188-298-4799	Sequence 4799, Ap	504	25	56.8	160	11	US-11-188-298-8822	Sequence 8822, Ap
432	26	59.1	661	11	US-11-019-711-107	Sequence 107, App	505	25	56.8	168	11	US-11-188-298-21771	Sequence 21771, A
433	26	59.1	667	9	US-10-506-454-135	Sequence 135, App	506	25	56.8	169	11	US-11-188-298-11568	Sequence 11568, A
434	26	59.1	719	9	US-10-511-538-247	Sequence 247, App	507	25	56.8	172	11	US-11-188-298-4488	Sequence 4488, Ap
435	26	59.1	748	11	US-11-098-686-10863	Sequence 10863, A	508	25	56.8	172	11	US-11-188-298-7142	Sequence 7142, Ap
436	26	59.1	754	11	US-11-188-298-17153	Sequence 17153, A	509	25	56.8	175	11	US-11-072-512-3905	Sequence 3905, Ap
437	26	59.1	799	8	US-10-511-455-62	Sequence 62, Appl	510	25	56.8	175	11	US-11-188-298-2331	Sequence 2331, Ap
438	26	59.1	837	11	US-11-045-004-1433	Sequence 1433, Ap	511	25	56.8	175	11	US-11-188-298-3706	Sequence 3706, Ap
439	26	59.1	980	11	US-11-064-246-10	Sequence 10, Appl	512	25	56.8	175	11	US-11-188-298-5136	Sequence 5136, Ap
440	26	59.1	980	11	US-11-169-041-141	Sequence 141, App	513	25	56.8	175	11	US-11-188-298-5441	Sequence 5441, Ap
441	26	59.1	1015	11	US-11-096-568A-29140	Sequence 29140, A	514	25	56.8	175	11	US-11-188-298-5764	Sequence 5764, Ap
442	26	59.1	1021	11	US-11-188-298-12108	Sequence 12108, A	515	25	56.8	175	11	US-11-188-298-5817	Sequence 5817, Ap
443	26	59.1	1036	11	US-11-188-298-12108	Sequence 12108, A	516	25	56.8	175	11	US-11-188-298-8692	Sequence 8692, Ap
444	26	59.1	1046	11	US-11-120-308-186	Sequence 186, App	517	25	56.8	175	11	US-11-188-298-9218	Sequence 9218, Ap
445	26	59.1	1218	11	US-11-052-554A-123	Sequence 123, App	518	25	56.8	175	11	US-11-188-298-9484	Sequence 9484, Ap
446	26	59.1	1331	11	US-11-096-568A-33412	Sequence 33412, A	519	25	56.8	175	11	US-11-188-298-11304	Sequence 11304, A
447	26	59.1	1394	11	US-11-096-568A-33411	Sequence 33411, A	520	25	56.8	175	11	US-11-188-298-11304	Sequence 11304, A
448	26	59.1	1482	11	US-11-096-568A-33410	Sequence 33410, A	521	25	56.8	175	11	US-11-188-298-12563	Sequence 12563, A
449	26	59.1	1575	8	US-10-505-928-257	Sequence 257, App	522	25	56.8	175	11	US-11-188-298-18593	Sequence 18593, A
450	26	59.1	1575	8	US-10-501-035-228	Sequence 228, App	523	25	56.8	175	11	US-11-188-298-18903	Sequence 18903, A
451	26	59.1	1614	9	US-10-821-234-903	Sequence 903, App	524	25	56.8	175	11	US-11-188-298-19137	Sequence 19137, A
452	26	59.1	1705	11	US-11-143-984A-37	Sequence 37, Appl	525	25	56.8	175	11	US-11-188-298-22095	Sequence 22095, A
453	26	59.1	3353	11	US-11-037-243-64	Sequence 64, Appl	526	25	56.8	178	11	US-11-188-298-9280	Sequence 9280, Ap
454	26	59.1	3580	9	US-10-510-941-14	Sequence 14, Appl	527	25	56.8	182	11	US-11-188-298-9580	Sequence 9580, Ap
455	25.5	58.0	150	11	US-11-188-298-10053	Sequence 10053, A	528	25	56.8	184	11	US-11-188-298-4254	Sequence 2454, Ap
456	25.5	58.0	170	11	US-11-188-298-17440	Sequence 17440, A	529	25	56.8	186	11	US-11-096-568A-7876	Sequence 7876, Ap
457	25.5	58.0	224	11	US-11-188-298-1379	Sequence 1379, Ap	530	25	56.8	185	11	US-11-188-298-8073	Sequence 8073, Ap
458	25.5	58.0	231	11	US-11-188-298-19496	Sequence 19496, A	531	25	56.8	198	11	US-11-087-099-12220	Sequence 12220, A
459	25.5	58.0	242	11	US-11-188-298-1552	Sequence 1552, Ap	532	25	56.8	199	11	US-11-087-099-4794	Sequence 4794, Ap

533	25	56.8	200	11	US-11-073-605-3	Sequence 3, App11	606	25	56.8	334	11	US-11-096-568A-24300	Sequence 24300, A
534	25	56.8	200	11	US-11-140-284-4	Sequence 4, App11	607	25	56.8	335	9	US-10-194-887-174	Sequence 174, App
535	25	56.8	201	11	US-11-096-568A-2258	Sequence 2258, App	608	25	56.8	335	9	US-10-195-883-174	Sequence 174, App
536	25	56.8	202	11	US-11-172-740-622	Sequence 622, App	609	25	56.8	335	9	US-10-195-888-174	Sequence 174, App
537	25	56.8	204	11	US-11-087-099-12123	Sequence 12123, A	610	25	56.8	335	9	US-10-195-889-174	Sequence 174, App
538	25	56.8	205	9	US-10-485-517-68	Sequence 368, App	611	25	56.8	335	11	US-11-090-729-2	Sequence 2, App11
539	25	56.8	205	11	US-11-096-568A-20850	Sequence 20850, A	612	25	56.8	336	11	US-11-096-568A-22140	Sequence 22140, A
540	25	56.8	206	9	US-10-467-657-5870	Sequence 5870, App	613	25	56.8	338	11	US-11-087-099-10239	Sequence 10239, A
541	25	56.8	212	9	US-10-514-038-8	Sequence 8, App11	614	25	56.8	338	11	US-11-045-004-1918	Sequence 1918, App
542	25	56.8	212	11	US-11-172-740-2389	Sequence 2389, App	615	25	56.8	339	11	US-11-188-298-5693	Sequence 5693, App
543	25	56.8	216	11	US-11-188-298-14986	Sequence 14986, A	616	25	56.8	339	11	US-11-188-298-5707	Sequence 5707, App
544	25	56.8	224	9	US-10-857-780-25	Sequence 25, App1	617	25	56.8	340	11	US-11-188-298-1300	Sequence 1300, App
545	25	56.8	227	11	US-11-124-367A-348	Sequence 348, App	618	25	56.8	341	11	US-11-188-298-18091	Sequence 18091, A
546	25	56.8	229	11	US-11-096-568A-11753	Sequence 11753, A	619	25	56.8	342	11	US-11-098-688-10807	Sequence 9252, App
547	25	56.8	235	11	US-11-096-568A-12943	Sequence 12943, A	620	25	56.8	342	11	US-11-188-298-9252	Sequence 3793, App
548	25	56.8	235	11	US-11-045-004-1829	Sequence 1829, App	621	25	56.8	342	11	US-11-188-298-14396	Sequence 14396, A
549	25	56.8	236	7	US-09-978-360A-568	Sequence 568, App	622	25	56.8	343	11	US-11-045-004-215	Sequence 215, App
550	25	56.8	243	11	US-11-082-389-268	Sequence 268, App	623	25	56.8	344	11	US-11-188-298-1842	Sequence 1842, App
551	25	56.8	243	11	US-11-082-389-270	Sequence 270, App	624	25	56.8	344	11	US-11-188-298-15693	Sequence 15693, A
552	25	56.8	255	11	US-11-140-284-40	Sequence 40, App	625	25	56.8	344	11	US-11-188-298-16784	Sequence 16784, A
553	25	56.8	255	11	US-11-096-568A-4394	Sequence 4394, App	626	25	56.8	344	11	US-11-188-298-16784	Sequence 16784, A
554	25	56.8	257	11	US-11-096-568A-2257	Sequence 2257, App	627	25	56.8	349	11	US-11-188-298-7056	Sequence 18372, A
555	25	56.8	259	11	US-11-096-568A-20849	Sequence 20849, App	628	25	56.8	351	11	US-11-188-298-18372	Sequence 10064, A
556	25	56.8	261	11	US-11-096-568A-10852	Sequence 10852, A	629	25	56.8	352	11	US-11-087-099-10064	Sequence 996, App
557	25	56.8	262	11	US-11-172-740-2394	Sequence 2394, App	630	25	56.8	352	11	US-11-188-298-996	Sequence 29249, App
558	25	56.8	263	11	US-11-188-298-19813	Sequence 19813, A	631	25	56.8	353	11	US-11-096-568A-22249	Sequence 814, App
559	25	56.8	265	11	US-11-079-463-5506	Sequence 5506, App	632	25	56.8	357	11	US-11-188-298-814	Sequence 2393, App
560	25	56.8	265	11	US-11-031-206-10	Sequence 10, App1	633	25	56.8	359	11	US-11-172-740-2333	Sequence 24299, A
561	25	56.8	266	11	US-11-096-568A-10851	Sequence 10851, A	634	25	56.8	362	11	US-11-096-568A-24229	Sequence 1, App11
562	25	56.8	268	11	US-11-096-568A-22646	Sequence 22646, A	635	25	56.8	363	11	US-11-121-731A-1	Sequence 186, App
563	25	56.8	269	9	US-10-506-454-218	Sequence 218, App	636	25	56.8	364	9	US-10-131-826A-186	Sequence 186, App
564	25	56.8	276	11	US-11-096-568A-16470	Sequence 16470, A	637	25	56.8	364	9	US-10-973-115B-186	Sequence 186, App
565	25	56.8	278	11	US-11-172-740-2395	Sequence 2395, App	638	25	56.8	364	9	US-10-137-873A-186	Sequence 186, App
566	25	56.8	281	9	US-10-467-657-988	Sequence 988, App	639	25	56.8	364	9	US-10-152-370-186	Sequence 186, App
567	25	56.8	282	11	US-11-188-298-21070	Sequence 21070, A	640	25	56.8	364	11	US-11-140-284-38	Sequence 38, App1
568	25	56.8	283	11	US-11-172-740-2392	Sequence 2392, App	641	25	56.8	364	11	US-11-290-153-186	Sequence 186, App
569	25	56.8	283	11	US-11-079-463-6676	Sequence 6676, App	642	25	56.8	365	11	US-11-096-568A-11751	Sequence 11751, A
570	25	56.8	285	9	US-10-821-234-983	Sequence 983, App	643	25	56.8	365	11	US-11-188-298-861	Sequence 861, App
571	25	56.8	286	11	US-11-087-099-6031	Sequence 6031, App	644	25	56.8	370	11	US-11-073-605-2	Sequence 2, App11
572	25	56.8	286	11	US-11-045-004-1935	Sequence 1935, App	645	25	56.8	370	11	US-11-075-400-14	Sequence 14, App1
573	25	56.8	289	11	US-11-096-568A-1117	Sequence 1117, App	646	25	56.8	370	11	US-11-140-284-8	Sequence 8, App11
574	25	56.8	291	11	US-11-156-084-357	Sequence 357, App	647	25	56.8	370	11	US-11-140-284-36	Sequence 36, App1
575	25	56.8	292	11	US-11-168-298-21162	Sequence 21162, A	648	25	56.8	370	11	US-11-264-096-1481	Sequence 1481, App
576	25	56.8	292	11	US-11-045-004-982	Sequence 982, App	649	25	56.8	370	11	US-11-264-096-1482	Sequence 1482, App
577	25	56.8	293	11	US-11-096-568A-6292	Sequence 6292, App	650	25	56.8	374	9	US-10-793-626-1562	Sequence 1562, App
578	25	56.8	294	11	US-11-098-686-11075	Sequence 11075, A	651	25	56.8	378	9	US-10-517-939-74	Sequence 24, App1
579	25	56.8	295	11	US-11-096-568A-22142	Sequence 22142, A	652	25	56.8	380	11	US-11-087-099-9801	Sequence 9801, App
580	25	56.8	295	11	US-11-096-568A-22645	Sequence 22645, A	653	25	56.8	384	11	US-11-172-740-2388	Sequence 2388, App
581	25	56.8	297	11	US-11-096-568A-12942	Sequence 12942, A	654	25	56.8	385	11	US-11-046-255A-6	Sequence 6, App11
582	25	56.8	297	11	US-11-096-568A-22141	Sequence 22141, A	655	25	56.8	385	11	US-11-172-740-2387	Sequence 2387, App
583	25	56.8	299	11	US-11-096-568A-10850	Sequence 10850, A	656	25	56.8	385	11	US-11-079-463-6454	Sequence 6464, App
584	25	56.8	303	11	US-11-096-568A-18848	Sequence 18848, A	657	25	56.8	386	9	US-10-131-826A-340	Sequence 340, App
585	25	56.8	304	11	US-11-096-568A-16469	Sequence 16469, A	658	25	56.8	386	9	US-10-973-115B-340	Sequence 340, App
586	25	56.8	305	11	US-11-096-568A-11752	Sequence 11752, A	659	25	56.8	386	9	US-10-137-873A-340	Sequence 340, App
587	25	56.8	306	11	US-11-188-298-9242	Sequence 9242, App	660	25	56.8	386	9	US-10-152-370-340	Sequence 340, App
588	25	56.8	309	11	US-11-096-568A-1116	Sequence 1116, App	661	25	56.8	386	11	US-11-185-878-2	Sequence 2, App11
589	25	56.8	309	11	US-11-096-568A-22644	Sequence 22644, A	662	25	56.8	386	11	US-11-099-315-1	Sequence 1, App11
590	25	56.8	312	11	US-11-188-298-8626	Sequence 8626, App	663	25	56.8	386	11	US-11-221-881-4	Sequence 4, App11
591	25	56.8	312	11	US-11-188-298-17323	Sequence 17323, A	664	25	56.8	386	11	US-11-290-153-340	Sequence 340, App
592	25	56.8	317	11	US-11-096-568A-18847	Sequence 18847, A	665	25	56.8	389	11	US-11-087-099-9640	Sequence 9640, App
593	25	56.8	318	11	US-11-096-568A-6291	Sequence 6291, App	666	25	56.8	389	11	US-11-087-099-11867	Sequence 11867, A
594	25	56.8	322	11	US-11-073-605-4	Sequence 4, App11	667	25	56.8	389	11	US-11-096-568A-33526	Sequence 32526, A
595	25	56.8	322	11	US-11-140-284-6	Sequence 6, App11	668	25	56.8	397	11	US-11-188-298-1801	Sequence 1801, App
596	25	56.8	323	11	US-11-096-568A-6290	Sequence 6290, App	669	25	56.8	397	11	US-11-098-686-10967	Sequence 10967, A
597	25	56.8	324	11	US-11-096-568A-16468	Sequence 16468, A	670	25	56.8	399	11	US-11-045-004-1201	Sequence 1201, App
598	25	56.8	325	9	US-10-745-586-69	Sequence 69, App1	671	25	56.8	402	11	US-11-096-568A-24298	Sequence 24298, A
599	25	56.8	325	11	US-11-098-686-10395	Sequence 10395, A	672	25	56.8	404	11	US-11-031-209-56	Sequence 56, App1
600	25	56.8	327	11	US-11-090-878-16	Sequence 16, App1	673	25	56.8	407	11	US-11-087-099-9438	Sequence 936, App
601	25	56.8	327	11	US-11-188-298-1443	Sequence 1443, App	674	25	56.8	412	11	US-11-096-568A-7421	Sequence 7421, App
602	25	56.8	328	11	US-11-096-568A-7355	Sequence 7355, App	675	25	56.8	413	11	US-11-096-568A-7420	Sequence 7420, App
603	25	56.8	328	11	US-11-188-298-4133	Sequence 4133, App	676	25	56.8	417	9	US-10-915-002-443	Sequence 345, App
604	25	56.8	330	9	US-10-501-035-323	Sequence 323, App	677	25	56.8	417	9	US-10-915-002-445	Sequence 345, App
605	25	56.8	333	11	US-11-096-568A-18846	Sequence 18846, A	678	25	56.8	417	9	US-10-915-002-352	Sequence 352, App

679	25	56.8	419	11	US-11-096-568A-19366	Sequence 19366, A	752	25	56.8	562	11	US-11-288-433-78	Sequence 78, Appl
680	25	56.8	419	11	US-11-096-568A-30251	Sequence 30251, A	753	25	56.8	563	9	US-10-454-437-120	Sequence 120, Appl
681	25	56.8	419	11	US-11-096-568A-31502	Sequence 31502, A	754	25	56.8	568	9	US-10-506-454-1188	Sequence 1188, Ap
682	25	56.8	421	11	US-11-096-568A-29248	Sequence 29248, A	755	25	56.8	579	11	US-11-067-260-6	Sequence 6, Appl1
683	25	56.8	426	11	US-11-096-568A-10197	Sequence 10197, A	756	25	56.8	584	11	US-11-188-298-13315	Sequence 13315, A
684	25	56.8	428	9	US-10-763-712A-118	Sequence 118, App	757	25	56.8	599	11	US-11-188-298-16912	Sequence 16912, A
685	25	56.8	428	11	US-11-096-568A-32525	Sequence 32525, A	758	25	56.8	610	11	US-11-194-246-312	Sequence 312, App
686	25	56.8	428	11	US-11-188-298-10530	Sequence 10530, A	759	25	56.8	617	11	US-11-188-298-19346	Sequence 19346, A
687	25	56.8	429	9	US-10-984-376-2	Sequence 2, Appl1	760	25	56.8	624	11	US-11-079-463-7504	Sequence 7504, Ap
688	25	56.8	429	11	US-11-188-298-7460	Sequence 7460, Ap	761	25	56.8	634	11	US-11-188-298-6710	Sequence 6710, Ap
689	25	56.8	430	11	US-11-188-298-8246	Sequence 8246, Ap	762	25	56.8	635	11	US-11-188-298-20118	Sequence 20118, A
690	25	56.8	430	11	US-11-188-298-13553	Sequence 13553, A	763	25	56.8	638	11	US-11-188-298-15845	Sequence 15845, A
691	25	56.8	430	11	US-11-188-298-17635	Sequence 17635, A	764	25	56.8	658	11	US-11-096-568A-27705	Sequence 27705, A
692	25	56.8	431	11	US-11-087-099-5470	Sequence 5470, Ap	765	25	56.8	659	9	US-10-793-626-1596	Sequence 1596, Ap
693	25	56.8	439	9	US-10-467-657-346	Sequence 346, App	766	25	56.8	668	9	US-10-454-437-118	Sequence 118, App
694	25	56.8	439	11	US-11-087-099-7449	Sequence 7449, Ap	767	25	56.8	680	9	US-10-454-437-2008	Sequence 2008, Ap
695	25	56.8	440	11	US-11-188-298-21982	Sequence 21982, A	768	25	56.8	682	9	US-10-956-026-14	Sequence 14, Appl
696	25	56.8	444	11	US-11-045-004-1390	Sequence 1390, Ap	769	25	56.8	687	11	US-11-096-568A-27704	Sequence 27704, A
697	25	56.8	446	11	US-11-188-298-15173	Sequence 15173, A	770	25	56.8	696	11	US-11-072-512-2325	Sequence 2225, Ap
698	25	56.8	449	11	US-11-096-568A-30250	Sequence 30250, A	771	25	56.8	701	11	US-11-096-568A-27779	Sequence 27779, A
699	25	56.8	450	11	US-11-096-568A-31501	Sequence 31501, A	772	25	56.8	712	9	US-10-770-726-66	Sequence 66, Appl
700	25	56.8	452	11	US-11-096-568A-28121	Sequence 28121, A	773	25	56.8	727	11	US-11-096-568A-27703	Sequence 27703, A
701	25	56.8	454	11	US-11-188-298-6639	Sequence 6639, Ap	774	25	56.8	730	11	US-11-096-568A-27778	Sequence 27778
702	25	56.8	455	9	US-10-467-657-5828	Sequence 5828, Ap	775	25	56.8	737	11	US-11-145-035-38	Sequence 38, Appl
703	25	56.8	458	9	US-10-454-437-124	Sequence 124, App	776	25	56.8	748	11	US-11-087-099-2913	Sequence 2913, App
704	25	56.8	458	11	US-11-087-099-5424	Sequence 5424, Ap	777	25	56.8	750	11	US-11-188-298-15480	Sequence 15480, A
705	25	56.8	460	11	US-11-087-099-2946	Sequence 2946, Ap	778	25	56.8	755	9	US-11-087-039-5306	Sequence 5306, Ap
706	25	56.8	460	11	US-11-188-298-13823	Sequence 13823, A	779	25	56.8	756	9	US-10-956-026-13	Sequence 13, Appl
707	25	56.8	464	11	US-11-067-260-2	Sequence 2, Appl1	780	25	56.8	766	9	US-10-793-626-2578	Sequence 2578, Ap
708	25	56.8	465	11	US-11-156-084-101	Sequence 101, App1	781	25	56.8	766	11	US-11-144-985-9	Sequence 9, Appl1
709	25	56.8	467	11	US-11-127-817-15	Sequence 15, Appl	782	25	56.8	773	9	US-10-995-561-882	Sequence 852, App
710	25	56.8	471	11	US-11-188-298-11574	Sequence 11574, A	783	25	56.8	793	11	US-11-067-260-8	Sequence 8, Appl1
711	25	56.8	472	11	US-11-188-298-13467	Sequence 13467, A	784	25	56.8	796	11	US-11-087-099-11950	Sequence 11950, A
712	25	56.8	477	11	US-11-096-568A-7354	Sequence 7354, Ap	785	25	56.8	799	11	US-11-188-298-1293	Sequence 1293, Ap
713	25	56.8	478	11	US-11-096-568A-10196	Sequence 10196, A	786	25	56.8	812	11	US-11-045-004-396	Sequence 396, App
714	25	56.8	481	11	US-11-188-298-14796	Sequence 14796, A	787	25	56.8	817	11	US-11-079-463-6485	Sequence 6485, Ap
715	25	56.8	483	11	US-11-031-206-126	Sequence 126, App	788	25	56.8	822	11	US-11-067-260-4	Sequence 4, Appl1
716	25	56.8	484	9	US-10-784-004-322	Sequence 322, App	789	25	56.8	832	11	US-11-096-568A-27777	Sequence 27777, A
717	25	56.8	484	9	US-10-784-004-372	Sequence 372, App	790	25	56.8	858	9	US-10-995-561-854	Sequence 854, App
718	25	56.8	484	9	US-10-784-004-906	Sequence 906, App	791	25	56.8	875	11	US-11-188-298-8045	Sequence 8045, Ap
719	25	56.8	484	9	US-10-784-004-930	Sequence 930, App	792	25	56.8	892	11	US-11-237-600-4	Sequence 4, Appl1
720	25	56.8	485	11	US-11-096-568A-30249	Sequence 30249, A	793	25	56.8	919	9	US-10-858-730-206	Sequence 206, Appl
721	25	56.8	485	11	US-11-123-241-72	Sequence 72, Appl	794	25	56.8	954	11	US-11-079-463-6804	Sequence 6804, Ap
722	25	56.8	486	11	US-11-096-568A-33500	Sequence 33500, A	795	25	56.8	1009	9	US-10-784-004-353	Sequence 353, App
723	25	56.8	488	9	US-10-984-376-1	Sequence 1, Appl1	796	25	56.8	1021	11	US-11-079-463-7716	Sequence 7716, Ap
724	25	56.8	488	11	US-11-096-568A-7353	Sequence 7353, Ap	797	25	56.8	1023	11	US-11-188-298-7150	Sequence 7150, A
725	25	56.8	488	11	US-11-096-568A-19365	Sequence 19365, A	798	25	56.8	1025	11	US-11-188-298-21705	Sequence 21705, A
726	25	56.8	490	11	US-11-096-568A-10195	Sequence 10195, A	799	25	56.8	1029	9	US-10-213-535-22	Sequence 22, Appl
727	25	56.8	493	11	US-11-096-568A-25295	Sequence 25295, A	800	25	56.8	1035	8	US-10-505-928-83	Sequence 83, App1
728	25	56.8	494	11	US-11-096-568A-25295	Sequence 25295, A	801	25	56.8	1035	9	US-10-995-561-557	Sequence 557, App
729	25	56.8	496	9	US-10-770-726-72	Sequence 72, Appl	802	25	56.8	1050	8	US-10-505-928-347	Sequence 347, App
730	25	56.8	497	9	US-10-984-376-3	Sequence 3, Appl1	803	25	56.8	1050	9	US-10-523-477-12	Sequence 12, Appl
731	25	56.8	499	9	US-10-793-626-1484	Sequence 1484, Ap	804	25	56.8	1050	9	US-10-770-726-47	Sequence 47, Appl
732	25	56.8	502	11	US-11-096-568A-32524	Sequence 32524, A	805	25	56.8	1065	11	US-11-191-375-16	Sequence 16, Appl
733	25	56.8	506	9	US-10-467-657-2434	Sequence 2434, Ap	806	25	56.8	1065	11	US-11-191-375-16	Sequence 16, Appl
734	25	56.8	509	11	US-11-096-568A-25294	Sequence 25294, A	807	25	56.8	1065	11	US-11-191-588-16	Sequence 16, Appl
735	25	56.8	509	11	US-11-096-568A-8730	Sequence 8730, Ap	808	25	56.8	1068	11	US-11-191-374-45	Sequence 45, Appl
736	25	56.8	516	11	US-11-080-991-2	Sequence 2, Appl1	809	25	56.8	1068	11	US-11-191-375-45	Sequence 45, Appl
737	25	56.8	519	9	US-10-131-826A-210	Sequence 210, App1	810	25	56.8	1068	11	US-11-191-588-45	Sequence 45, Appl
738	25	56.8	519	9	US-10-973-115B-210	Sequence 210, App	811	25	56.8	1069	11	US-11-191-374-17	Sequence 17, Appl
739	25	56.8	519	9	US-10-137-873A-210	Sequence 210, App	812	25	56.8	1069	11	US-11-191-375-17	Sequence 17, Appl
740	25	56.8	519	9	US-10-152-370-210	Sequence 210, App	813	25	56.8	1069	11	US-11-191-588-17	Sequence 17, Appl
741	25	56.8	519	11	US-11-290-153-210	Sequence 210, App	814	25	56.8	1071	9	US-10-467-657-1654	Sequence 1654, Ap
742	25	56.8	520	11	US-11-096-568A-28120	Sequence 28120, A	815	25	56.8	1073	11	US-11-253-665-10	Sequence 210, App
743	25	56.8	525	11	US-11-079-463-9449	Sequence 9449, Ap	816	25	56.8	1112	11	US-11-096-568A-33821	Sequence 33821, A
744	25	56.8	530	11	US-11-098-686-10432	Sequence 10432, A	817	25	56.8	1113	11	US-11-096-568A-33820	Sequence 33820, A
745	25	56.8	531	11	US-11-188-298-14335	Sequence 14335, A	818	25	56.8	1114	11	US-11-096-568A-31532	Sequence 31532, A
746	25	56.8	534	9	US-10-784-004-1215	Sequence 1215, Ap	819	25	56.8	1115	11	US-11-096-568A-33819	Sequence 33819, A
747	25	56.8	542	9	US-10-506-454-1664	Sequence 1664, Ap	820	25	56.8	1116	11	US-11-096-568A-31531	Sequence 31531, A
748	25	56.8	548	11	US-11-045-004-1058	Sequence 1058, Ap	821	25	56.8	1153	11	US-11-096-568A-31530	Sequence 31530, A
749	25	56.8	554	11	US-11-096-568A-19364	Sequence 19364, A	822	25	56.8	1178	9	US-10-995-561-851	Sequence 851, App
750	25	56.8	559	11	US-11-188-298-5883	Sequence 5883, Ap	823	25	56.8	1255	11	US-11-079-463-8758	Sequence 8758, Ap
751	25	56.8	561	11	US-11-096-568A-25293	Sequence 25293, A	824	25	56.8	1296	11	US-11-188-298-5560	Sequence 5560, Ap

825	25	56.8	1296	11	US-11-188-298-9652	Sequence 9652, Ap	898	24	54.5	189	11	US-11-098-666-11293	Sequence 11293, A
826	25	56.8	1313	9	US-10-204-639-55	Sequence 55, Appl	899	24	54.5	189	11	US-11-087-099-6536	Sequence 6536, Ap
827	25	56.8	1313	11	US-11-091-668-4	Sequence 4, Appl1	900	24	54.5	189	11	US-11-096-568A-13607	Sequence 13607, A
828	25	56.8	1337	11	US-11-112-304A-33	Sequence 33, Appl	901	24	54.5	189	11	US-11-188-298-22339	Sequence 22339, A
829	25	56.8	1368	11	US-11-079-463-5298	Sequence 5298, Ap	902	24	54.5	190	11	US-11-087-099-4780	Sequence 4780, Ap
830	25	56.8	1398	11	US-11-188-298-14982	Sequence 14982, Ap	903	24	54.5	190	11	US-11-096-568A-13606	Sequence 13606, A
831	25	56.8	1425	11	US-11-024-959-367	Sequence 367, App	904	24	54.5	196	11	US-11-087-099-8102	Sequence 8102, Ap
832	25	56.8	1487	9	US-10-511-989-24	Sequence 24, Appl	905	24	54.5	196	11	US-11-087-099-11119	Sequence 11119, A
833	25	56.8	1704	11	US-11-075-046-40	Sequence 40, Appl	906	24	54.5	198	11	US-11-096-568A-1742	Sequence 1742, Ap
834	25	56.8	1711	11	US-11-143-984A-38	Sequence 38, Appl	907	24	54.5	198	11	US-11-045-004-82	Sequence 82, Appl
835	25	56.8	1809	8	US-10-370-959-67	Sequence 67, Appl	908	24	54.5	200	11	US-11-055-822-732	Sequence 732, Appl
836	25	56.8	1866	8	US-10-511-937-2968	Sequence 2968, Ap	909	24	54.5	201	11	US-11-079-463-6349	Sequence 6349, Ap
837	25	56.8	1866	9	US-10-511-989-186	Sequence 186, Appl	910	24	54.5	203	11	US-11-087-099-4485	Sequence 4485, Ap
838	25	56.8	1943	11	US-11-122-396-5	Sequence 5, Appl1	911	24	54.5	203	11	US-11-087-099-4676	Sequence 4676, Ap
839	25	56.8	1954	9	US-10-784-004-1235	Sequence 1235, Ap	912	24	54.5	203	11	US-11-087-099-4715	Sequence 4715, Ap
840	25	56.8	2504	9	US-10-647-956A-8	Sequence 8, Appl1	913	24	54.5	203	11	US-11-087-099-4708	Sequence 4708, Ap
841	25	56.8	2902	11	US-11-052-554A-91	Sequence 91, Appl	914	24	54.5	205	11	US-11-087-099-10808	Sequence 10808, A
842	24.5	55.7	287	11	US-11-188-298-8235	Sequence 8235, Ap	915	24	54.5	215	11	US-11-096-568A-4002	Sequence 4002, Ap
843	24	54.5	15	9	US-10-530-061-1727	Sequence 1727, Ap	916	24	54.5	215	11	US-11-096-568A-14974	Sequence 14974, A
844	24	54.5	28	9	US-10-895-064-2901	Sequence 2901, Ap	917	24	54.5	219	9	US-10-793-626-22	Sequence 22, Appl
845	24	54.5	28	11	US-11-129-741-2901	Sequence 2901, Ap	918	24	54.5	219	11	US-11-040-596-14	Sequence 14, Appl
846	24	54.5	39	11	US-11-068-783-99	Sequence 99, Appl	919	24	54.5	220	11	US-11-087-099-5592	Sequence 5592, Ap
847	24	54.5	40	11	US-11-068-783-79	Sequence 79, Appl	920	24	54.5	220	11	US-11-096-568A-19911	Sequence 19911, A
848	24	54.5	40	11	US-11-068-783-98	Sequence 98, Appl	921	24	54.5	220	11	US-11-079-463-7715	Sequence 7715, Ap
849	24	54.5	40	11	US-11-096-568A-14070	Sequence 14070, A	922	24	54.5	224	11	US-11-188-298-4361	Sequence 4361, Ap
850	24	54.5	51	11	US-11-096-568A-12553	Sequence 2553, A	923	24	54.5	225	11	US-11-087-099-5490	Sequence 5490, Ap
851	24	54.5	69	11	US-11-045-004-2353	Sequence 371, App	924	24	54.5	226	9	US-10-506-454-59	Sequence 59, Appl
852	24	54.5	90	11	US-11-000-463-371	Sequence 843, App	925	24	54.5	226	11	US-11-096-568A-69157	Sequence 29157, A
853	24	54.5	90	11	US-11-000-463-843	Sequence 843, App	926	24	54.5	227	11	US-11-172-740-2123	Sequence 2123, Ap
854	24	54.5	118	9	US-10-976-933-6	Sequence 6, Appl1	927	24	54.5	227	11	US-11-172-740-2362	Sequence 2362, Ap
855	24	54.5	118	11	US-11-087-099-4247	Sequence 4247, Ap	928	24	54.5	232	11	US-11-079-463-7919	Sequence 7919, Ap
856	24	54.5	121	9	US-10-993-543-166	Sequence 166, App	929	24	54.5	232	9	US-10-784-004-1226	Sequence 1226, Ap
857	24	54.5	127	9	US-10-506-454-408	Sequence 408, App	930	24	54.5	234	11	US-10-467-657-3424	Sequence 3424, Ap
858	24	54.5	131	9	US-10-915-002-181	Sequence 181, App	931	24	54.5	234	11	US-11-172-740-366	Sequence 366, App
859	24	54.5	131	9	US-10-915-002-304	Sequence 204, App	932	24	54.5	235	11	US-11-096-568A-4298	Sequence 4298, Ap
860	24	54.5	140	11	US-11-188-298-1495	Sequence 1495, Ap	933	24	54.5	237	9	US-10-883-512-2	Sequence 2, Appl1
861	24	54.5	143	11	US-10-506-454-814	Sequence 814, App	934	24	54.5	237	11	US-11-096-568A-6715	Sequence 6715, Ap
862	24	54.5	143	11	US-11-096-568A-4005	Sequence 4005, App	935	24	54.5	239	9	US-10-957-659-54	Sequence 54, Appl
863	24	54.5	143	11	US-11-096-568A-12854	Sequence 12854, A	936	24	54.5	239	11	US-11-097-589-53	Sequence 53, Appl
864	24	54.5	146	9	US-10-835-615-263	Sequence 263, App	937	24	54.5	240	11	US-11-087-099-5219	Sequence 219, Ap
865	24	54.5	146	9	US-10-835-615-320	Sequence 270, App	938	24	54.5	240	11	US-11-096-568A-67114	Sequence 6714, Ap
866	24	54.5	146	9	US-10-835-615-332	Sequence 332, App	939	24	54.5	243	11	US-11-172-740-386	Sequence 386, App
867	24	54.5	146	9	US-10-835-615-392	Sequence 392, App	940	24	54.5	243	11	US-11-045-004-740	Sequence 740, App
868	24	54.5	146	11	US-11-188-298-10556	Sequence 10556, A	941	24	54.5	244	8	US-10-511-937-2598	Sequence 2598, Ap
869	24	54.5	147	9	US-10-506-454-1674	Sequence 1674, Ap	942	24	54.5	244	11	US-11-072-512-3205	Sequence 3205, Ap
870	24	54.5	147	11	US-11-188-298-12143	Sequence 12143, A	943	24	54.5	244	11	US-11-096-568A-1741	Sequence 1741, Ap
871	24	54.5	148	11	US-11-096-568A-12198	Sequence 12198, A	944	24	54.5	245	11	US-11-096-568A-24638	Sequence 24638, A
872	24	54.5	150	9	US-10-454-437-368	Sequence 368, App	945	24	54.5	245	11	US-11-212-443-2	Sequence 29278, A
873	24	54.5	154	11	US-11-188-298-15373	Sequence 15373, A	946	24	54.5	248	11	US-11-096-568A-29278	Sequence 8991, Ap
874	24	54.5	158	11	US-11-072-512-2761	Sequence 2761, Ap	947	24	54.5	249	11	US-11-087-099-8891	Sequence 8891, Ap
875	24	54.5	159	11	US-11-188-298-7290	Sequence 7290, Ap	948	24	54.5	251	11	US-11-055-822-470	Sequence 902, App
876	24	54.5	160	11	US-11-188-298-80803	Sequence 20803, A	949	24	54.5	254	9	US-10-793-626-902	Sequence 927, App
877	24	54.5	161	11	US-11-188-298-14438	Sequence 14438, A	950	24	54.5	254	11	US-10-506-454-927	Sequence 12382, A
878	24	54.5	161	11	US-11-188-298-15937	Sequence 15937, A	951	24	54.5	254	9	US-11-087-099-12382	Sequence 17513, A
879	24	54.5	161	11	US-11-188-298-17256	Sequence 17256, A	952	24	54.5	255	11	US-11-096-568A-29125	Sequence 14973, A
880	24	54.5	161	11	US-11-188-298-18828	Sequence 18828, A	953	24	54.5	256	11	US-11-096-568A-17973	Sequence 9204, Ap
881	24	54.5	161	11	US-11-188-298-21756	Sequence 21756, A	954	24	54.5	257	11	US-11-096-568A-1973	Sequence 9204, Ap
882	24	54.5	161	11	US-11-188-298-22019	Sequence 22019, A	955	24	54.5	257	11	US-11-045-004-9240	Sequence 12190, Ap
883	24	54.5	161	11	US-11-264-096-911	Sequence 911, App	956	24	54.5	257	11	US-11-096-568A-1740	Sequence 1740, Ap
884	24	54.5	163	11	US-11-188-298-1588	Sequence 1588, App	957	24	54.5	259	11	US-11-096-568A-1740	Sequence 514, App
885	24	54.5	163	11	US-11-188-298-18936	Sequence 18936, A	958	24	54.5	263	9	US-10-506-454-114	Sequence 6074, Ap
886	24	54.5	164	9	US-10-467-657-232	Sequence 232, App	959	24	54.5	265	11	US-10-467-657-1104	Sequence 6973, Ap
887	24	54.5	164	9	US-10-467-657-664	Sequence 664, App	960	24	54.5	265	11	US-11-079-463-6873	Sequence 6355, Ap
888	24	54.5	164	9	US-10-714-887-334	Sequence 334, App	961	24	54.5	266	11	US-11-087-099-6355	Sequence 7372, Ap
889	24	54.5	166	9	US-10-745-586-102	Sequence 102, App	962	24	54.5	266	11	US-11-188-298-2732	Sequence 2732, Ap
890	24	54.5	166	11	US-11-096-568A-5852	Sequence 5852, Ap	963	24	54.5	267	11	US-11-079-463-9591	Sequence 9591, Ap
891	24	54.5	172	11	US-11-096-568A-12853	Sequence 12853, A	964	24	54.5	272	11	US-11-045-004-1900	Sequence 1900, Ap
892	24	54.5	172	11	US-11-188-298-21182	Sequence 21182, A	965	24	54.5	273	11	US-11-096-568A-22311	Sequence 22311, A
893	24	54.5	174	9	US-10-467-657-5438	Sequence 5438, Ap	966	24	54.5	273	11	US-11-096-568A-28257	Sequence 28257, A
894	24	54.5	178	11	US-11-188-298-19891	Sequence 19891, A	967	24	54.5	276	11	US-11-087-099-2221	Sequence 2221, Ap
895	24	54.5	179	11	US-11-219-282-26	Sequence 26, Appl	968	24	54.5	278	11	US-11-087-099-7933	Sequence 7933, Ap
896	24	54.5	184	11	US-11-096-568A-4004	Sequence 4004, App	969	24	54.5	280	11	US-11-096-568A-1043	Sequence 1043, Ap
897	24	54.5	188	11	US-11-096-568A-4003	Sequence 4003, App	970	24	54.5	280	11	US-11-087-099-1043	Sequence 1043, Ap

```
971 24 54.5 282 11 US-11-096-568A-24637 Sequence 24637, A
972 24 54.5 282 11 US-11-096-568A-28256 Sequence 28256, A
973 24 54.5 282 11 US-11-096-568A-29156 Sequence 29156, A
974 24 54.5 283 11 US-11-087-099-2950 Sequence 2950, Ap
975 24 54.5 283 11 US-11-087-099-12181 Sequence 12181, A
976 24 54.5 285 11 US-11-096-568A-4297 Sequence 4297, Ap
977 24 54.5 285 11 US-11-188-298-8208 Sequence 8208, Ap
978 24 54.5 285 11 US-11-045-004-463 Sequence 463, App
979 24 54.5 287 11 US-11-096-568A-24636 Sequence 24636, A
980 24 54.5 287 11 US-11-079-463-5988 Sequence 5988, A
981 24 54.5 289 11 US-11-052-554A-75 Sequence 75, Appl
982 24 54.5 290 9 US-10-218-784-40 Sequence 40, Appl
983 24 54.5 290 9 US-10-219-061-40 Sequence 40, Appl
984 24 54.5 290 9 US-10-219-062-40 Sequence 40, Appl
985 24 54.5 290 9 US-10-219-064-40 Sequence 40, Appl
986 24 54.5 290 9 US-10-233-134-40 Sequence 65, Appl
987 24 54.5 290 11 US-11-240-769-65 Sequence 12742, A
988 24 54.5 290 11 US-11-096-568A-12742 Sequence 12742, A
989 24 54.5 291 11 US-11-096-568A-5851 Sequence 5851, Ap
990 24 54.5 291 11 US-11-045-004-1378 Sequence 1378, Ap
991 24 54.5 292 9 US-10-467-657-7552 Sequence 7552, Ap
992 24 54.5 294 11 US-11-096-568A-14972 Sequence 14972, A
993 24 54.5 294 11 US-11-096-568A-15366 Sequence 15366, A
994 24 54.5 296 9 US-10-783-626-1674 Sequence 1674, Ap
995 24 54.5 296 11 US-11-087-099-11379 Sequence 11379, A
996 24 54.5 297 11 US-11-096-568A-25549 Sequence 25549, A
997 24 54.5 299 11 US-11-079-463-9363 Sequence 9363, Ap
998 24 54.5 301 11 US-11-096-568A-22310 Sequence 22310, A
999 24 54.5 303 11 US-11-096-568A-22309 Sequence 22309, A
1000 24 54.5 303 11 US-11-096-568A-27771 Sequence 27771, A
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-1713
; Sequence 1713, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1713
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1713
```

```
Query Match 100.0%; Score 44; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0055;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLEDLMGT 9
Db 3 TLEDLMGT 11
```

```
RESULT 2
US-10-511-814-8
; Sequence 8, Application US/10511814
```

```
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrock, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT APPLICATION NUMBER: US/10/511,814
; PRIOR FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence://Note =
; OTHER INFORMATION: Synthetic Construct
US-10-511-814-8
```

```
Query Match 100.0%; Score 44; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLEDLMGT 9
Db 78 TLEDLMGT 86
```

```
RESULT 3
US-10-511-814-11
; Sequence 11, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrock, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT APPLICATION NUMBER: US/10/511,814
; PRIOR FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence://Note =
; OTHER INFORMATION: Synthetic Construct
US-10-511-814-11
```

```
Query Match 100.0%; Score 44; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 TLEDLMGT 9
Db 78 TLEDLMGT 86
```

```
RESULT 4
US-10-530-253-14
; Sequence 14, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
```

APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 14
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-14

Query Match 100.0%; Score 44; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 5
US-11-179-478-4
Sequence 4, Application US/11179478
Publication No. US20050249745A1

GENERAL INFORMATION:

APPLICANT: BURGER, Alexander
APPLICANT: HALSER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
TITLE OF INVENTION: FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/179,478
FILING DATE: 13-JULY-2005

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:
NAME: Sandercok, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: protein

US-11-179-478-4

Query Match 100.0%; Score 44; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.045; 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLEDLMGT 9
Db 78 TLEDLMGT 86

RESULT 6
US-10-530-253-1

Sequence 1, Application US/10530253
Publication No. US20060014926A1

GENERAL INFORMATION:

APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-1

Query Match 100.0%; Score 44; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLEDLMGT 9
Db 228 TLEDLMGT 236

RESULT 7
US-10-530-253-3

Sequence 3, Application US/10530253
Publication No. US20060014926A1

GENERAL INFORMATION:

APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 44; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TLEDLMGT 9

Db 228 TLEDLMGT 236

```
RESULT 8
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5
```

Query Match 100.0%; Score 44; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9

Db 228 TLEDLMGT 236

```
RESULT 9
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7
```

Query Match 100.0%; Score 44; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9

Db 78 TLEDLMGT 86

RESULT 10

```
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9
```

Query Match 100.0%; Score 44; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9

Db 78 TLEDLMGT 86

```
RESULT 11
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11
```

Query Match 100.0%; Score 44; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.13; Mismatches 0; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9

Db 78 TLEDLMGT 86

```
RESULT 12
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANG, XIAOWU
```

```
/ TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
/ FILE REFERENCE: 116620-003
/ CURRENT APPLICATION NUMBER: US/11/192,923A
/ PRIOR FILING DATE: 2005-07-29
/ PRIOR APPLICATION NUMBER: CN 03115272.4
/ PRIOR FILING DATE: 2003-01-30
/ PRIOR APPLICATION NUMBER: CN 03115273.2
/ NUMBER OF SEQ ID NOS: 45
/ SOFTWARE: PatentIn Ver. 3.3
/ SEQ ID NO 2
/ LENGTH: 256
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match      100.0%; Score 44; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LEDLDMGT 9
Db 78 LEDLDMGT 86

RESULT 13
US-10-530-061-1714
/ Sequence 1714, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SOUTHWOOD, SCOTT
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.033US02/EKS/M-M
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 1714
/ LENGTH: 15
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-1714

Query Match      88.6%; Score 39; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.059;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLDMGT 9
Db 1 LEDLDMGT 8

RESULT 14
US-10-530-253-30
/ Sequence 30, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casasetti, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
```

```
/ CURRENT FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
/ PRIOR FILING DATE: 2002-10-03
/ NUMBER OF SEQ ID NOS: 65
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 30
/ LENGTH: 99
/ TYPE: PRT
/ ORGANISM: Human papillomavirus type 35
US-10-530-253-30

Query Match      88.6%; Score 39; DB 9; Length 99;
Best Local Similarity 100.0%; Pred. No. 0.49;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLDMGT 9
Db 80 LEDLDMGT 87

RESULT 15
US-10-530-061-1747
/ Sequence 1747, Application US/10530061
/ Publication No. US20060079453A1
/ GENERAL INFORMATION:
/ APPLICANT: SIDNEY, JOHN
/ APPLICANT: SOUTHWOOD, SCOTT
/ APPLICANT: SETTE, ALESSANDRO
/ TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
/ FILE REFERENCE: 2060.033US02/EKS/M-M
/ CURRENT APPLICATION NUMBER: US/10/530,061
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US03/31308
/ PRIOR FILING DATE: 2003-10-03
/ PRIOR APPLICATION NUMBER: 60/416,207
/ PRIOR FILING DATE: 2002-10-03
/ PRIOR APPLICATION NUMBER: 60/417,269
/ PRIOR FILING DATE: 2002-10-08
/ NUMBER OF SEQ ID NOS: 2503
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 1747
/ LENGTH: 15
/ TYPE: PRT
/ ORGANISM: Human papillomavirus
US-10-530-061-1747

Query Match      79.5%; Score 35; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 0.4;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LEDLDMGT 9
Db 3 LEDLDMGT 11

RESULT 16
US-10-530-253-36
/ Sequence 36, Application US/10530253
/ Publication No. US20060014926A1
/ GENERAL INFORMATION:
/ APPLICANT: Casasetti, Maria C.
/ APPLICANT: Smith, Larry
/ APPLICANT: Jeffrey K. Pullen
/ APPLICANT: Susan P. McElhinney
/ TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
/ FILE REFERENCE: 00630/100M137-US2
/ CURRENT APPLICATION NUMBER: US/10/530,253
/ PRIOR FILING DATE: 2005-04-04
/ PRIOR APPLICATION NUMBER: PCT/US2003/031726
/ PRIOR FILING DATE: 2003-10-02
/ PRIOR APPLICATION NUMBER: US 60/415,929
```

;; PRIOR FILING DATE: 2002-10-03
;; NUMBER OF SEQ ID NOS: 65
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 36
;; LENGTH: 98
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 58
US-10-530-253-36

Query Match 79.5%; Score 35; DB 9; Length 98;
Best Local Similarity 77.8%; Pred. No. 3.3;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 79 TIOQLMGT 87

RESULT 17
US-10-530-061-1725
; Sequence 1725, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR FILING DATE: 2002-10-08
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1725
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1725

Query Match 75.0%; Score 33; DB 9; Length 15;
Best Local Similarity 66.7%; Pred. No. 1;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 3 TIOQLMGT 11

RESULT 18
US-10-530-253-29
; Sequence 29, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 29

;; LENGTH: 97
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 33
US-10-530-253-29

Query Match 75.0%; Score 33; DB 9; Length 97;
Best Local Similarity 66.7%; Pred. No. 8.3;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 78 TIOQLMGT 86

RESULT 19
US-11-091-668-8
; Sequence 8, Application US/11091668
; Publication No. US20050262585A1
; GENERAL INFORMATION:
; APPLICANT: University of Nebraska
; APPLICANT: Mackenzie, Sally Ann
; APPLICANT: Vaghechipawala, Zarir Erach
; TITLE OF INVENTION: Soybean FGAM Synthase Promoters Useful in Parasite Control
; FILE REFERENCE: 1231-221
; CURRENT APPLICATION NUMBER: US/11/091,668
; PRIOR FILING DATE: 2005-03-28
; PRIOR APPLICATION NUMBER: 60556745
; PRIOR FILING DATE: 2004-03-26
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 60
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
US-11-091-668-8

Query Match 72.7%; Score 32; DB 11; Length 60;
Best Local Similarity 66.7%; Pred. No. 7.8;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 TLEDLMGT 9
Db 25 TMSDLQGT 33

RESULT 20
US-10-853-807A-57
; Sequence 57, Application US/10853807A
; Publication No. US20060034860A1
; GENERAL INFORMATION:
; APPLICANT: Hydrigenics
; TITLE OF INVENTION: Protein-protein interactions in Human Immunodeficiency Virus
; FILE REFERENCE: B5055AA
; CURRENT APPLICATION NUMBER: US/10/853,807A
; PRIOR FILING DATE: 2004-05-26
; PRIOR APPLICATION NUMBER: US 60/333,346
; PRIOR FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: US 60/385,132
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: PCT/EP 02/13868
; PRIOR FILING DATE: 2002-11-26
; NUMBER OF SEQ ID NOS: 132
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 57
; LENGTH: 194
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Translation of SEQ ID NO34
US-10-853-807A-57

Query Match 72.7%; Score 32; DB 9; Length 194;
Best Local Similarity 75.0%; Pred. No. 29;

Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 2 LEDL1MGT 9
Db 52 LKDLVWGT 59

RESULT 21
US-11-022-289-12
; Sequence 12, Application US/11022289
; Publication No. US20050249722A1
; GENERAL INFORMATION:
; APPLICANT: Lazear, Gregory Alan
; TITLE OF INVENTION: FC POLYPEPTIDES WITH NOVEL FC LIGAND BINDING SITES
; FILE REFERENCE: 185831/US/2
; CURRENT APPLICATION NUMBER: US/11/022,289
; CURRENT FILING DATE: 2004-12-21
; PRIOR APPLICATION NUMBER: US 60/531,752
; PRIOR FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 12
; LENGTH: 236
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-022-289-12

Query Match 72.7%; Score 32; DB 11; Length 236;
Best Local Similarity 75.0%; Pred. No. 36;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDL1MGT 9
Db 17 LEDL1LGS 24

RESULT 22
US-11-188-298-21103
; Sequence 21103, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 21103
; LENGTH: 326
; TYPE: PRT
; ORGANISM: Streptomyces rochei
US-11-188-298-21103

Query Match 72.7%; Score 32; DB 11; Length 326;
Best Local Similarity 75.0%; Pred. No. 52;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDL1MGT 9
Db 310 VEDL1VGT 317

RESULT 23
US-10-999-866-32
; Sequence 32, Application US/10999866
; Publication No. US20050266004A1
; GENERAL INFORMATION:
; APPLICANT: GILES-KOMAR, Jill; SCALLON, Bernard J.; CAI, Ann
; TITLE OF INVENTION: ANTI-HUMAN LYMPHOTOXIN ALPHA ANTIBODIES, COMPOSITIONS, METHODS AN
; FILE REFERENCE: CENS042NP
; CURRENT APPLICATION NUMBER: US/10/999,866

; CURRENT FILING DATE: 2004-11-30
; PRIOR APPLICATION NUMBER: 60/527,794
; PRIOR FILING DATE: 2003-12-08
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 32
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(340)
; OTHER INFORMATION: IGA2 heavy chain constant region
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(102)
; OTHER INFORMATION: CH1
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (103)..(108)
; OTHER INFORMATION: hinge
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (109)..(209)
; OTHER INFORMATION: CH2
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (210)..(340)
; OTHER INFORMATION: CH3
US-10-999-866-32

Query Match 72.7%; Score 32; DB 9; Length 340;
Best Local Similarity 75.0%; Pred. No. 55;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDL1MGT 9
Db 121 LEDL1LGS 128

RESULT 24
US-10-493-909-18
; Sequence 18, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; APPLICANT: WYCOFF, KEITH L.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-493-909-18

Query Match 72.7%; Score 32; DB 9; Length 340;
Best Local Similarity 75.0%; Pred. No. 55;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDL1MGT 9
Db 121 LEDL1LGS 128

RESULT 25
US-10-935-005B-63
Sequence 63, Application US/10935005B
Publication No. US20060051844A1
GENERAL INFORMATION:
APPLICANT: HEAVNER, George A.; KNIGHT, David; GRAVER, John; SCALLON, Bernard;
APPLICANT: NESSFOR, Thomas; HUANG, CHICHANG
TITLE OF INVENTION: HUMAN EPO MIMETIC HINGE CORE MIMETIBODIES,
FILE REFERENCE: CENS039NP
CURRENT APPLICATION NUMBER: US/10/935,005B
CURRENT FILING DATE: 2004-09-03
NUMBER OF SEQ ID NOS: 89
SOFTWARE: PatentIn version 3.3
SEQ ID NO 63
LENGTH: 340
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(340)
OTHER INFORMATION: Iga2 heavy chain constant region
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(102)
OTHER INFORMATION: CH1
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (103)..(108)
OTHER INFORMATION: hinge
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (109)..(209)
OTHER INFORMATION: CH2
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (210)..(340)
OTHER INFORMATION: CH3
US-10-935-005B-63

Query Match 72.7%; Score 32; DB 9; Length 340;
Best Local Similarity 75.0%; Pred. No. 55;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 2 LEDLNGT 9
Db 121 LEDLNGS 128

RESULT 26
US-11-091-234A-32
Sequence 32, Application US/11091234A
Publication No. US2006008845A1
GENERAL INFORMATION:
APPLICANT: Lu, Jih
TITLE OF INVENTION: METHOD AND APPARATUS FOR ANALYZING AND GENERATING
TITLE OF INVENTION: HUMAN ANTIBODY AMINO ACID AND NUCLEIC ACID SEQUENCES
FILE REFERENCE: CENS052NP
CURRENT APPLICATION NUMBER: US/11/091,234A
CURRENT FILING DATE: 2005-03-28
PRIOR APPLICATION NUMBER: 60/558,090
PRIOR FILING DATE: 2004-03-31
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn version 3.3
SEQ ID NO 32
LENGTH: 340
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(340)
OTHER INFORMATION: Iga2 heavy chain constant region
FEATURE:
NAME/KEY: MISC FEATURE

LOCATION: (1)..(102)
OTHER INFORMATION: CH1
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (103)..(108)
OTHER INFORMATION: hinge
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (109)..(209)
OTHER INFORMATION: CH2
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (210)..(340)
OTHER INFORMATION: CH3
US-11-091-234A-32

Query Match 72.7%; Score 32; DB 10; Length 340;
Best Local Similarity 75.0%; Pred. No. 55;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLNGT 9
Db 121 LEDLNGS 128

RESULT 27
US-11-061-821-32
Sequence 32, Application US/11061821
Publication No. US2005026005A1
GENERAL INFORMATION:
APPLICANT: Heavner, George; Li, J; Oneil, Karyn
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING IL-13 RELATED PATHOLOGIES
FILE REFERENCE: CENS048 NP
CURRENT APPLICATION NUMBER: US/11/061,821
CURRENT FILING DATE: 2005-02-18
PRIOR APPLICATION NUMBER: 60/548,648
PRIOR FILING DATE: 2004-02-27
NUMBER OF SEQ ID NOS: 42
SOFTWARE: PatentIn Ver 3.3
SEQ ID NO 32
LENGTH: 340
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(340)
OTHER INFORMATION: Iga2 heavy chain constant region
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(102)
OTHER INFORMATION: CH1
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (103)..(108)
OTHER INFORMATION: hinge
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (109)..(209)
OTHER INFORMATION: CH2
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (210)..(340)
OTHER INFORMATION: CH3
US-11-061-821-32

Query Match 72.7%; Score 32; DB 11; Length 340;
Best Local Similarity 75.0%; Pred. No. 55;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 2 LEDLNGT 9
Db 121 LEDLNGS 128


```
RESULT 28
US-10-493-909-16
; Sequence 16, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; APPLICANT: WYCOFF, KEITH L.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
; TITLE OF INVENTION: AND PATHOGEN-MEDIATED DISEASES
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; PRIOR FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 353
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-493-909-16

Query Match          72.7%; Score 32; DB 9; Length 353;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDLMGT 9
Db 134 LEDLIGS 141

RESULT 29
US-11-022-289-9
; Sequence 9, Application US/11022289
; Publication No. US20050249723A1
; GENERAL INFORMATION:
; APPLICANT: LAZAR, Gregory Alan
; TITLE OF INVENTION: FC POLYPEPTIDES WITH NOVEL FC LIGAND BINDING SITES
; FILE REFERENCE: 185831/US/2
; CURRENT APPLICATION NUMBER: US/11/022,289
; PRIOR FILING DATE: 2004-12-21
; PRIOR APPLICATION NUMBER: US 60/531,752
; PRIOR FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 9
; LENGTH: 353
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-022-289-9

Query Match          72.7%; Score 32; DB 11; Length 353;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDLMGT 9
Db 134 LEDLIGS 141

RESULT 30
US-10-999-866-31
; Sequence 31, Application US/10999866
; Publication No. US20050266004A1
; GENERAL INFORMATION:
; APPLICANT: GILES-KOMAR, JILL; SCALLON, Bernard J.; CAI, Ann
; TITLE OF INVENTION: ANTI-HUMAN LYMPHOTOXIN ALPHA ANTIBODIES, COMPOSITIONS, METHODS AN
; FILE REFERENCE: CENS042NP
; CURRENT APPLICATION NUMBER: US/10/999,866
; CURRENT FILING DATE: 2004-11-30
```

```
; PRIOR APPLICATION NUMBER: 60/527,794
; PRIOR FILING DATE: 2003-12-08
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 31
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(354)
; OTHER INFORMATION: IgA1 heavy chain constant region
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(102)
; OTHER INFORMATION: CH1
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (103)..(121)
; OTHER INFORMATION: hinge
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (122)..(222)
; OTHER INFORMATION: CH2
; NAME/KEY: MISC FEATURE
; LOCATION: (223)..(354)
; OTHER INFORMATION: CH3
US-10-999-866-31

Query Match          72.7%; Score 32; DB 9; Length 354;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 LEDLMGT 9
Db 134 LEDLIGS 141

RESULT 31
US-10-935-005B-62
; Sequence 62, Application US/10935005B
; Publication No. US20060051844A1
; GENERAL INFORMATION:
; APPLICANT: HEAVNER, George A.; KNIGHT, David; GRAYEB, John; SCALLON, Bernard;
; TITLE OF INVENTION: HUMAN EPO MIMETIC HINGE CORE MIMETIBODIES,
; FILE REFERENCE: CENS039NP
; CURRENT APPLICATION NUMBER: US/10/935,005B
; PRIOR FILING DATE: 2004-09-03
; NUMBER OF SEQ ID NOS: 89
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 62
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(354)
; OTHER INFORMATION: IgA1 heavy chain constant region
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(102)
; OTHER INFORMATION: CH1
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (103)..(121)
; OTHER INFORMATION: hinge
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (122)..(222)
; OTHER INFORMATION: CH2
; FEATURE:
```

NAME/KEY: MISC FEATURE
LOCATION: (223)..(354)
OTHER INFORMATION: CH3
US-10-935-005B-62

Query Match 72.7%; Score 32; DB 9; Length 354;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLDMGT 9
Db 134 LEDLDMGT 141

RESULT 32
US-11-091-234A-31
Sequence 31, Application US/11091234A
Publication No. US2006008845A1
GENERAL INFORMATION:
APPLICANT: Lu, Jin
TITLE OF INVENTION: METHOD AND APPARATUS FOR ANALYZING AND GENERATING
FILE REFERENCE: CENS052NP
CURRENT APPLICATION NUMBER: US/11/091,234A
PRIOR FILING DATE: 2005-03-28
PRIOR APPLICATION NUMBER: 60/558,090
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn version 3.3
SEQ ID NO 31
LENGTH: 354
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(102)
OTHER INFORMATION: CH1
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (103)..(121)
OTHER INFORMATION: hinge
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (122)..(222)
OTHER INFORMATION: CH2
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (223)..(354)
OTHER INFORMATION: CH3
US-11-091-234A-31

Query Match 72.7%; Score 32; DB 10; Length 354;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLDMGT 9
Db 134 LEDLDMGT 141

RESULT 33
US-11-061-821-31
Sequence 31, Application US/11061821
Publication No. US20050286005A1
GENERAL INFORMATION:
APPLICANT: Heavener, George; Li, Li; Oneill, Karyn
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING IL-13 RELATED PATHOLOGIES
FILE REFERENCE: CENS048 NP
CURRENT APPLICATION NUMBER: US/11/061,821

CURRENT FILING DATE: 2005-02-18
PRIOR APPLICATION NUMBER: 60/548,648
PRIOR FILING DATE: 2004-02-27
NUMBER OF SEQ ID NOS: 42
SOFTWARE: PatentIn Ver 3.3
SEQ ID NO 31
LENGTH: 354
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (1)..(102)
OTHER INFORMATION: CH1
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (103)..(121)
OTHER INFORMATION: hinge
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (122)..(222)
OTHER INFORMATION: CH2
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (223)..(354)
OTHER INFORMATION: CH3
US-11-061-821-31

Query Match 72.7%; Score 32; DB 11; Length 354;
Best Local Similarity 75.0%; Pred. No. 57;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLDMGT 9
Db 134 LEDLDMGT 141

RESULT 34
US-11-264-096-2194
Sequence 2194, Application US/11264096
Publication No. US20060084794A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PFS46D1
CURRENT APPLICATION NUMBER: US/11/264,096
CURRENT FILING DATE: 2005-11-02
PRIOR APPLICATION NUMBER: 09/833,245
PRIOR FILING DATE: 2001-04-12
PRIOR APPLICATION NUMBER: 60/229,358
PRIOR FILING DATE: 2000-04-12
PRIOR APPLICATION NUMBER: 60/256,931
PRIOR FILING DATE: 2000-12-21
PRIOR APPLICATION NUMBER: 60/199,384
PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 2267
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2194
LENGTH: 487
TYPE: PRT
ORGANISM: Homo sapiens
US-11-264-096-2194

Query Match 72.7%; Score 32; DB 11; Length 487;
Best Local Similarity 75.0%; Pred. No. 82;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 LEDLDMGT 9
Db 268 LEDLDMGT 275

```
RESULT 35
US-11-072-512-3243
; Sequence 3243, Application US/11072512
; Publication No. US2006002945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
; APPLICANT: HIO, YURI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: TAMECHIKA, ICHIRO
; APPLICANT: SEKI, NAOHICO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: Novel full length cDNA
; FILE REFERENCE: 084335-0191
; CURRENT APPLICATION NUMBER: US/11/072,512
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US 60/350,978
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: JP 2001-379298
; PRIOR FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3243
; LENGTH: 491
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-072-512-3243

Query Match          72.7%; Score 32; DB 11; Length 491;
Best Local Similarity 75.0%; Pred. No. 83;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      272 LEDLLGS 279

RESULT 36
US-11-264-096-302
; Sequence 302, Application US/11264096
; Publication No. US20060084794A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PFS46D1
; CURRENT APPLICATION NUMBER: US/11/264,096
; CURRENT FILING DATE: 2005-11-02
; PRIOR APPLICATION NUMBER: 09/833,245
; PRIOR FILING DATE: 2001-04-12
; PRIOR APPLICATION NUMBER: 60/229,358
; PRIOR FILING DATE: 2000-04-12
; PRIOR APPLICATION NUMBER: 60/256,931
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: 60/199,384
; PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 2267
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 302
; LENGTH: 495
; TYPE: PRT
```

```
; ORGANISM: Homo sapiens
US-11-264-096-302

Query Match          72.7%; Score 32; DB 11; Length 495;
Best Local Similarity 75.0%; Pred. No. 84;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      276 LEDLLGS 283

RESULT 37
US-11-072-512-3006
; Sequence 3006, Application US/11072512
; Publication No. US2006002945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
; APPLICANT: HIO, YURI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: TAMECHIKA, ICHIRO
; APPLICANT: SEKI, NAOHICO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: Novel full length cDNA
; FILE REFERENCE: 084335-0191
; CURRENT APPLICATION NUMBER: US/11/072,512
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US 60/350,978
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: JP 2001-379298
; PRIOR FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3006
; LENGTH: 496
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-072-512-3006

Query Match          72.7%; Score 32; DB 11; Length 496;
Best Local Similarity 75.0%; Pred. No. 84;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      277 LEDLLGS 284

RESULT 38
US-11-072-512-3773
; Sequence 3773, Application US/11072512
; Publication No. US2006002945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
```

```

; APPLICANT: HIO, YURI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: TAMECHIKA, ICHIRO
; APPLICANT: SEKI, NAOHIKO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTOTYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: Novel full length cDNA
; FILE REFERENCE: 084335-0191
; CURRENT APPLICATION NUMBER: US/11/072,512
; PRIOR FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US 60/350,978
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: JP 2001-379298
; PRIOR FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3773
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-072-512-3773

Query Match          72.7%; Score 32; DB 11; Length 497;
Best Local Similarity 75.0%; Pred. No. 84;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
Db      278 LEDLGLS 285

RESULT 39
US-11-072-512-3233
; Sequence 3233, Application US/11072512
; Publication No. US20060029945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
; APPLICANT: HIO, YURI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: TAMECHIKA, ICHIRO
; APPLICANT: SEKI, NAOHIKO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTOTYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: Novel full length cDNA
; FILE REFERENCE: 084335-0191
; CURRENT APPLICATION NUMBER: US/11/072,512
; PRIOR FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: US 60/350,978
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: JP 2001-379298
; PRIOR FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3233
; LENGTH: 508
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-072-512-3233
```

```

Query Match          72.7%; Score 32; DB 11; Length 508;
Best Local Similarity 75.0%; Pred. No. 86;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
Db      289 LEDLGLS 296

RESULT 40
US-11-264-096-2189
; Sequence 2189, Application US/11264096
; Publication No. US20060084794A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Albumin Fusion Proteins
; FILE REFERENCE: PF546D1
; CURRENT APPLICATION NUMBER: US/11/264,096
; PRIOR FILING DATE: 2005-11-02
; PRIOR APPLICATION NUMBER: 09/833,245
; PRIOR FILING DATE: 2001-04-12
; PRIOR APPLICATION NUMBER: 60/229,358
; PRIOR FILING DATE: 2000-04-12
; PRIOR APPLICATION NUMBER: 60/256,931
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: 60/199,384
; PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 2267
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2189
; LENGTH: 530
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (488)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (490)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (494)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (495)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (505)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-11-264-096-2189

Query Match          72.7%; Score 32; DB 11; Length 530;
Best Local Similarity 75.0%; Pred. No. 90;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
Db      275 LEDLGLS 282

RESULT 41
US-10-493-903-99
; Sequence 99, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; APPLICANT: WYCOFF, KEITH L.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
```

```

; TITLE OF INVENTION: AND PATHOGEN-MEDIATED DISEASES
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 99
; LENGTH: 538
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: ATR-IGA2 fusion
; US-10-493-909-99

Query Match      72.7%; Score 32; DB 9; Length 538;
Best Local Similarity 75.0%; Pred. No. 92;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      319 LEDLILGS 326

RESULT 42
US-11-022-289-10
; Sequence 10, Application US/11022289
; Publication No. US20050249723a1
; GENERAL INFORMATION:
; APPLICANT: Lazar, Gregory Alan
; TITLE OF INVENTION: FC POLYPEPTIDES WITH NOVEL FC LIGAND BINDING SITES
; FILE REFERENCE: 185831/US/2
; CURRENT APPLICATION NUMBER: US/11/022,289
; CURRENT FILING DATE: 2004-12-21
; PRIOR APPLICATION NUMBER: US 60/531,752
; PRIOR FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 10
; LENGTH: 564
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Synthetic
; US-11-022-289-10

Query Match      72.7%; Score 32; DB 11; Length 564;
Best Local Similarity 75.0%; Pred. No. 97;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      363 LEDLILGS 370

RESULT 43
US-11-096-568A-28443
; Sequence 28443, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 28443
; LENGTH: 764

Query Match      72.7%; Score 32; DB 11; Length 794;
Best Local Similarity 75.0%; Pred. No. 1.4e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      207 LEDVLMGS 214

RESULT 45
US-11-096-568A-28441
; Sequence 28441, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 28441
; LENGTH: 794
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(794)
; OTHER INFORMATION: Ceres Seq. ID no. 2731146
; US-11-096-568A-28441

Query Match      72.7%; Score 32; DB 11; Length 794;
Best Local Similarity 75.0%; Pred. No. 1.4e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      182 LEDVLMGS 189

RESULT 44
US-11-096-568A-28442
; Sequence 28442, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 28442
; LENGTH: 789
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(789)
; OTHER INFORMATION: Ceres Seq. ID no. 2731147
; US-11-096-568A-28442

Query Match      72.7%; Score 32; DB 11; Length 789;
Best Local Similarity 75.0%; Pred. No. 1.4e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
DB      207 LEDVLMGS 214

RESULT 45
US-11-096-568A-28441
; Sequence 28441, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 28441
; LENGTH: 794
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(794)
; OTHER INFORMATION: Ceres Seq. ID no. 2731146
; US-11-096-568A-28441

Query Match      72.7%; Score 32; DB 11; Length 794;
Best Local Similarity 75.0%; Pred. No. 1.4e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      2 LEDLMGT 9
      |||:||||
Db      212 LEDVLGMS 219

RESULT 46
US-10-493-909-8
; Sequence 8, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; PRIOR FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 8
; LENGTH: 799
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-493-909-8

Query Match      72.7%; Score 32; DB 9; Length 799;
Best Local Similarity 75.0%; Pred. No. 1.4e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
      |||:||||
Db      573 LEDVLGMS 580

RESULT 47
US-10-493-909-48
; Sequence 48, Application US/10493909
; Publication No. US20060015969A1
; GENERAL INFORMATION:
; APPLICANT: LARRICK, JAMES W.
; APPLICANT: WYCOFF, KEITH L.
; TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING TOXICITY
; FILE REFERENCE: 41514-20004.01
; CURRENT APPLICATION NUMBER: US/10/493,909
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: PCT/US01/13932
; PRIOR FILING DATE: 2001-04-28
; PRIOR APPLICATION NUMBER: 60/200,298
; PRIOR FILING DATE: 2000-04-28
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 48
; LENGTH: 822
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Protein
; OTHER INFORMATION: encoded by plasmid pSSPICAMHu2
US-10-493-909-48

Query Match      72.7%; Score 32; DB 9; Length 822;
Best Local Similarity 75.0%; Pred. No. 1.5e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
      |||:||||
Db      596 LEDVLGMS 603
```

```
RESULT 48
US-10-995-561-1009
; Sequence 1009, Application US/10995561
; Publication No. US20050272054A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE. METHODS OF
; TITLE OF INVENTION: DETECTION AND USES THEREOF
; FILE REFERENCE: CL001559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 1009
; LENGTH: 1141
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-995-561-1009

Query Match      72.7%; Score 32; DB 9; Length 1141;
Best Local Similarity 75.0%; Pred. No. 2.1e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
      |||:||||
Db      353 LKDLVWGT 360

RESULT 49
US-10-995-561-1010
; Sequence 1010, Application US/10995561
; Publication No. US20050272054A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE. METHODS OF
; TITLE OF INVENTION: DETECTION AND USES THEREOF
; FILE REFERENCE: CL001559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 1010
; LENGTH: 1141
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-995-561-1010

Query Match      72.7%; Score 32; DB 9; Length 1141;
Best Local Similarity 75.0%; Pred. No. 2.1e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2 LEDLMGT 9
      |||:||||
Db      353 LKDLVWGT 360

RESULT 50
US-10-506-454-1211
; Sequence 1211, Application US/10506454
; Publication No. US20060068386A1
; GENERAL INFORMATION:
; APPLICANT: Slesarev, Alexi I
; APPLICANT: Mezhevaeva, Katja V
; APPLICANT: Polishchik, Nikolai N
; APPLICANT: Shcherbinina, Olga V
; APPLICANT: Shakhova, Vera V
; APPLICANT: Mal'kh, Andrei G
; APPLICANT: Koz'yavkin, Sergei A
; TITLE OF INVENTION: The Complete Genome and Protein Sequences of the Hyperthermophil
```

; TITLE OF INVENTION: Methanopyrus kandleri AV19 and Monophyly of Archaeal Methanogens
; TITLE OF INVENTION: and Methods of Use Thereof
; FILE REFERENCE: FID001
; CURRENT APPLICATION NUMBER: US/10/506,454
; CURRENT FILING DATE: 2004-08-31
; PRIOR APPLICATION NUMBER: PCT/US03/06664
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: 60/361,742
; PRIOR FILING DATE: 2002-03-04
; NUMBER OF SEQ ID NOS: 1722
; SOFTWARE: Patent version 3.2
; SEQ ID NO 1211
; LENGTH: 269
; TYPE: PRT
; ORGANISM: Methanopyrus kandleri
US-10-506-454-1211

Query Match 70.5%; Score 31; DB 9; Length 269;
Best Local Similarity 75.0%; Pred. No. 68;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 TLBDLNG 8
|:|||||
Db 71 TVRD LMG 78

Search completed: May 5, 2006, 08:56:07
Job time : 10 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 01:33:35 ; Search time 18.2 Seconds
(without alignments)
40.884 Million cell updates/sec

Title: US-08-170-344-18
Perfect score: 42
Sequence: 1 LMGTLGIV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :
1: Issued Patents AA: *
2: /cgn2_6/ptodata/1/1aa/5 COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/6 COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/PTMUS COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/RE COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	100.0	9	1	US-08-787-547-106
2	42	100.0	9	2	US-08-948-378A-1
3	42	100.0	9	2	US-09-124-671-9
4	42	100.0	9	2	US-09-169-425C-1
5	42	100.0	9	2	US-08-197-484-65
6	42	100.0	9	2	US-09-759-960-1
7	42	100.0	9	2	US-09-601-729-271
8	42	100.0	9	2	US-10-365-908-5
9	42	100.0	9	4	PCT-US95-02121-65
10	42	100.0	10	2	US-10-365-908-47
11	42	100.0	13	2	US-08-948-378A-3
12	42	100.0	13	2	US-09-169-425C-3
13	42	100.0	13	2	US-09-759-960-3
14	42	100.0	16	2	US-09-169-425C-25
15	42	100.0	16	2	US-09-759-960-25
16	42	100.0	19	2	US-09-980-523A-18
17	42	100.0	20	2	US-08-075-541D-50
18	42	100.0	20	2	US-09-794-529B-12
19	42	100.0	20	2	US-09-794-529B-13
20	42	100.0	20	2	US-09-794-517A-12
21	42	100.0	20	2	US-09-794-517A-13
22	42	100.0	20	2	US-09-011-645E-12
23	42	100.0	20	2	US-09-011-645E-13
24	42	100.0	20	2	US-09-794-832-12
25	42	100.0	20	2	US-09-794-832-13
26	42	100.0	20	2	US-09-680-806A-12
27	42	100.0	20	2	US-09-680-806A-13

28	42	100.0	20	2	US-09-552-868-12	Sequence 12, Appl
29	42	100.0	20	2	US-09-552-868-13	Sequence 13, Appl
30	42	100.0	20	2	US-09-636-295-12	Sequence 12, Appl
31	42	100.0	20	2	US-09-636-295-13	Sequence 13, Appl
32	42	100.0	21	1	US-08-934-915-157	Sequence 15, Appl
33	42	100.0	21	1	US-08-934-915-157	Sequence 16, Appl
34	42	100.0	21	2	US-09-980-177A-76	Sequence 40, Appl
35	42	100.0	26	2	US-08-075-541D-40	Sequence 5, Appl
36	42	100.0	28	2	US-09-486-394-5	Sequence 54, Appl
37	42	100.0	30	1	US-08-934-915-54	Sequence 4, Appl
38	42	100.0	30	2	US-09-486-394-4	Sequence 6, Appl
39	42	100.0	59	2	US-09-390-027-6	Sequence 6, Appl
40	42	100.0	98	1	US-08-406-248-6	Sequence 42, Appl
41	42	100.0	98	2	US-08-075-541D-42	Sequence 1, Appl
42	42	100.0	98	2	US-08-944-368A-4	Sequence 4, Appl
43	42	100.0	98	2	US-09-820-764-4	Sequence 8, Appl
44	42	100.0	98	2	US-09-613-303-8	Sequence 19, Appl
45	42	100.0	98	2	US-09-566-420-19	Sequence 4, Appl
46	42	100.0	98	2	US-09-986-118A-4	Sequence 1, Appl
47	42	100.0	98	2	US-09-728-466-1	Sequence 4, Appl
48	42	100.0	98	2	US-09-824-017-4	Sequence 8, Appl
49	42	100.0	98	2	US-10-267-311-8	Sequence 19, Appl
50	42	100.0	98	2	US-09-637-746-3	Sequence 7, Appl
51	42	100.0	98	2	US-09-501-097A-17	Sequence 12, Appl
52	42	100.0	98	2	US-09-501-097A-12	Sequence 12, Appl
53	42	100.0	98	2	US-09-613-303-12	Sequence 12, Appl
54	42	100.0	121	2	US-10-267-311-12	Sequence 14, Appl
55	42	100.0	121	2	US-08-860-165-14	Sequence 14, Appl
56	42	100.0	172	2	US-08-860-165-14	Sequence 2, Appl
57	42	100.0	172	2	US-09-359-982-14	Sequence 35, Appl
58	42	100.0	165	2	US-09-462-893-2	Sequence 1, Appl
59	42	100.0	198	2	US-09-613-303-35	Sequence 1, Appl
60	42	100.0	198	2	US-10-267-311-35	Sequence 8, Appl
61	42	100.0	220	2	US-09-485-885-1	Sequence 12, Appl
62	42	100.0	220	2	US-09-485-885-8	Sequence 12, Appl
63	42	100.0	239	2	US-09-485-885-12	Sequence 20, Appl
64	42	100.0	253	1	US-08-459-818-20	Sequence 20, Appl
65	42	100.0	253	1	US-08-889-666-20	Sequence 20, Appl
66	42	100.0	253	1	US-08-465-078-20	Sequence 20, Appl
67	42	100.0	253	1	US-08-725-776-20	Sequence 20, Appl
68	42	100.0	253	1	US-08-488-062-20	Sequence 9, Appl
69	42	100.0	263	1	US-08-117-083-9	Sequence 10, Appl
70	42	100.0	266	2	US-08-860-165-10	Sequence 10, Appl
71	42	100.0	266	2	US-09-359-382-10	Sequence 1, Appl
72	42	100.0	266	2	US-09-367-309A-1	Sequence 25, Appl
73	42	100.0	287	2	US-09-501-097A-25	Sequence 33, Appl
74	42	100.0	295	2	US-09-613-303-33	Sequence 25, Appl
75	42	100.0	324	2	US-10-267-311-25	Sequence 6, Appl
76	42	100.0	324	2	US-09-485-885-6	Sequence 14, Appl
77	42	100.0	371	2	US-09-485-885-14	Sequence 22, Appl
78	42	100.0	390	2	US-09-501-097A-22	Sequence 19, Appl
79	42	100.0	420	2	US-09-613-303-19	Sequence 17, Appl
80	42	100.0	493	2	US-10-267-311-19	Sequence 17, Appl
81	42	100.0	493	2	US-09-613-303-17	Sequence 51, Appl
82	42	100.0	639	2	US-10-267-311-17	Sequence 51, Appl
83	42	100.0	639	2	US-09-613-303-51	Sequence 53, Appl
84	42	100.0	641	2	US-09-613-303-51	Sequence 29, Appl
85	42	100.0	647	2	US-10-267-311-53	Sequence 29, Appl
86	42	100.0	648	2	US-09-613-303-29	Sequence 41, Appl
87	42	100.0	648	2	US-10-267-311-29	Sequence 41, Appl
88	42	100.0	711	2	US-09-613-303-41	Sequence 45, Appl
89	42	100.0	711	2	US-10-267-311-41	Sequence 45, Appl
90	42	100.0	724	2	US-09-613-303-45	Sequence 38, Appl
91	42	100.0	724	2	US-10-267-311-45	Sequence 16, Appl
92	42	100.0	90.5	12	US-08-948-378A-16	Sequence 16, Appl
93	42	100.0	90.5	12	US-09-169-425C-16	Sequence 16, Appl
94	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl
95	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl
96	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl
97	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl
98	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl
99	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl
100	42	100.0	90.5	12	US-09-759-960-16	Sequence 16, Appl

101	38	90.5	13	2	US-08-948-788A-4	Sequence 4, Appl1	174	31	73.8	337	1	US-09-013-634-2	Sequence 7, Appl1
102	38	90.5	13	2	US-08-948-378A-19	Sequence 19, Appl1	175	31	73.8	413	2	US-10-104-047-2399	Sequence 2399, Ap
103	38	90.5	13	2	US-09-169-425C-4	Sequence 4, Appl1	176	31	73.8	464	2	US-09-724-864-40	Sequence 40, Appl1
104	38	90.5	13	2	US-09-169-425C-19	Sequence 19, Appl1	177	31	73.8	464	2	US-09-604-978-7	Sequence 7, Appl1
105	38	90.5	13	2	US-09-759-960-4	Sequence 4, Appl1	178	31	73.8	464	2	US-09-604-728-7	Sequence 7, Appl1
106	38	90.5	13	2	US-09-759-960-19	Sequence 19, Appl1	179	31	73.8	464	2	US-10-325-878-7	Sequence 7, Appl1
107	38	90.5	15	2	US-08-159-339A-1168	Sequence 1168, Ap	180	31	73.8	464	2	US-09-823-038A-47	Sequence 47, Appl1
108	38	90.5	20	2	US-08-075-541D-49	Sequence 49, Appl1	181	31	73.8	468	2	US-09-252-991A-22874	Sequence 22874, A
109	38	90.5	38	2	US-08-948-378A-6	Sequence 6, Appl1	182	31	73.8	559	2	US-09-583-110A-4688	Sequence 4688, Ap
110	38	90.5	38	2	US-09-169-425C-6	Sequence 6, Appl1	183	31	73.8	566	2	US-09-107-433-4306	Sequence 4206, Ap
111	38	90.5	38	2	US-09-759-960-6	Sequence 6, Appl1	184	31	73.8	595	2	US-09-248-796A-30423	Sequence 20423, Ap
112	34	81.0	10	2	US-10-365-908-46	Sequence 46, Appl1	185	31	73.8	613	2	US-09-328-352-7991	Sequence 7991, Ap
113	34	81.0	11	2	US-09-169-425C-33	Sequence 33, Appl1	186	30	71.4	65	2	US-09-107-523A-5728	Sequence 5728, Ap
114	34	81.0	11	2	US-09-759-960-33	Sequence 33, Appl1	187	30	71.4	209	2	US-09-902-540-9772	Sequence 9772, Ap
115	34	81.0	14	2	US-09-169-425C-32	Sequence 32, Appl1	188	30	71.4	242	2	US-09-489-039A-13008	Sequence 13008, A
116	34	81.0	14	2	US-09-759-960-32	Sequence 32, Appl1	189	30	71.4	245	2	US-09-489-039A-14192	Sequence 14192, A
117	34	81.0	205	2	US-09-902-540-12001	Sequence 12001, A	190	30	71.4	246	2	US-09-902-540-12655	Sequence 12655, A
118	34	81.0	283	2	US-09-248-796A-16105	Sequence 16105, A	191	30	71.4	267	2	US-09-902-540-13826	Sequence 12826, A
119	34	81.0	358	2	US-09-270-767-45720	Sequence 45720, A	192	30	71.4	324	2	US-09-248-796A-19970	Sequence 19970, A
120	33	78.6	9	2	US-09-124-671-8	Sequence 8, Appl1	193	30	71.4	373	2	US-09-134-001C-4029	Sequence 4029, Ap
121	33	78.6	9	2	US-10-365-908-54	Sequence 54, Appl1	194	30	71.4	383	1	US-08-597-545-2	Sequence 2, Appl1
122	33	78.6	20	2	US-09-794-5298-10	Sequence 10, Appl1	195	30	71.4	383	1	US-08-457-135-2	Sequence 2, Appl1
123	33	78.6	20	2	US-09-794-5298-11	Sequence 11, Appl1	196	30	71.4	383	2	US-09-142-027A-12	Sequence 12, Appl1
124	33	78.6	20	2	US-09-794-517A-10	Sequence 10, Appl1	197	30	71.4	467	2	US-09-540-236-2598	Sequence 2598, Ap
125	33	78.6	20	2	US-09-794-517A-11	Sequence 11, Appl1	198	30	71.4	474	2	US-09-489-039A-14147	Sequence 14147, A
126	33	78.6	20	2	US-09-011-645E-10	Sequence 10, Appl1	199	30	71.4	482	2	US-09-902-540-16520	Sequence 16520, A
127	33	78.6	20	2	US-09-011-645E-11	Sequence 11, Appl1	200	30	71.4	549	2	US-09-115-150-4	Sequence 4, Appl1
128	33	78.6	20	2	US-09-794-832-10	Sequence 10, Appl1	201	30	71.4	560	2	US-08-983-045-4	Sequence 4, Appl1
129	33	78.6	20	2	US-09-794-832-11	Sequence 11, Appl1	202	30	71.4	611	1	US-08-677-049-2	Sequence 2, Appl1
130	33	78.6	20	2	US-09-680-806A-10	Sequence 10, Appl1	203	30	71.4	765	2	US-08-444-818-70	Sequence 70, Appl1
131	33	78.6	20	2	US-09-680-806A-11	Sequence 11, Appl1	204	30	71.4	1306	2	US-08-999-774A-13	Sequence 13, Appl1
132	33	78.6	20	2	US-09-552-868-10	Sequence 10, Appl1	205	30	71.4	1317	2	US-09-949-016-7588	Sequence 7588, Ap
133	33	78.6	20	2	US-09-552-868-11	Sequence 11, Appl1	206	30	71.4	1452	2	US-09-252-991A-18118	Sequence 18118, Ap
134	33	78.6	20	2	US-09-636-295-11	Sequence 11, Appl1	207	29	69.0	9	2	US-09-169-484-70	Sequence 21, Appl1
135	33	78.6	20	2	US-09-636-295-11	Sequence 11, Appl1	208	29	69.0	9	2	US-08-197-484-70	Sequence 21, Appl1
136	33	78.6	56	2	US-09-902-540-12344	Sequence 12344, A	209	29	69.0	9	2	US-09-759-960-21	Sequence 21, Appl1
137	33	78.6	179	1	US-08-690-095-9	Sequence 9, Appl1	210	29	69.0	9	2	US-10-365-908-50	Sequence 81, Appl1
138	33	78.6	179	1	US-08-650-578-2	Sequence 2, Appl1	211	29	69.0	9	2	US-10-365-908-81	Sequence 81, Appl1
139	33	78.6	179	1	US-08-688-342-3	Sequence 3, Appl1	212	29	69.0	9	4	PCT-US95-02121-70	Sequence 9, Appl1
140	33	78.6	179	1	US-09-113-788-3	Sequence 3, Appl1	213	29	69.0	10	2	US-09-405-986A-10	Sequence 10, Appl1
141	33	78.6	179	2	US-09-113-789-9	Sequence 9, Appl1	214	29	69.0	10	2	US-10-365-908-91	Sequence 91, Appl1
142	33	78.6	179	2	US-09-919-039-130	Sequence 130, App	215	29	69.0	10	2	US-10-365-908-131	Sequence 131, App
143	33	78.6	179	2	US-09-949-016-6200	Sequence 6200, Ap	216	29	69.0	11	2	US-09-169-425C-31	Sequence 31, Appl1
144	33	78.6	375	2	US-09-000-094-22	Sequence 22, Appl1	217	29	69.0	11	2	US-09-759-960-31	Sequence 31, Appl1
145	33	78.6	375	2	US-10-011-749-22	Sequence 22, Appl1	218	29	69.0	11	2	US-09-759-960-31	Sequence 31, Appl1
146	33	78.6	412	2	US-09-202-918-2	Sequence 2, Appl1	219	29	69.0	13	2	US-08-159-339A-1167	Sequence 1167, Ap
147	33	78.6	465	2	US-09-000-094-24	Sequence 24, Appl1	220	29	69.0	44	1	US-08-472-244-10	Sequence 10, Appl1
148	33	78.6	465	2	US-10-011-749-24	Sequence 24, Appl1	221	29	69.0	68	2	US-08-302-756E-23	Sequence 23, Appl1
149	33	78.6	483	2	US-09-489-039A-13018	Sequence 13018, A	222	29	69.0	85	2	US-09-902-540-10326	Sequence 10326, A
150	33	78.6	601	1	US-08-606-288-7	Sequence 7, Appl1	223	29	69.0	101	2	US-09-198-452A-1227	Sequence 1227, App
151	33	78.6	601	1	US-08-606-288-10	Sequence 10, Appl1	224	29	69.0	101	2	US-09-438-185A-213	Sequence 213, App
152	33	78.6	601	2	US-09-347-483-7	Sequence 7, Appl1	225	29	69.0	112	2	US-10-360-101-261	Sequence 261, App
153	33	78.6	601	2	US-09-347-483-10	Sequence 10, Appl1	226	29	69.0	143	2	US-09-270-767-34202	Sequence 34202, A
154	33	78.6	1587	2	US-09-000-094-46	Sequence 46, Appl1	227	29	69.0	143	2	US-09-270-767-49244	Sequence 49244, A
155	33	78.6	1587	2	US-10-011-749-46	Sequence 46, Appl1	228	29	69.0	147	2	US-09-540-236-3333	Sequence 3333, Ap
156	32	76.2	340	2	US-09-214-631-3	Sequence 3, Appl1	229	29	69.0	159	2	US-09-134-000C-4250	Sequence 4250, Ap
157	32	76.2	340	2	US-09-051-994-2	Sequence 2, Appl1	230	29	69.0	169	2	US-09-540-226-3514	Sequence 3514, Ap
158	32	76.2	340	2	US-08-635-130A-4	Sequence 4, Appl1	231	29	69.0	185	2	US-09-270-767-58500	Sequence 58500, A
159	32	76.2	397	2	US-09-949-016-10967	Sequence 6076, Ap	232	29	69.0	186	2	US-09-489-039A-12969	Sequence 12969, A
160	32	76.2	455	2	US-09-949-016-10967	Sequence 10967, A	233	29	69.0	215	1	US-08-690-095-7	Sequence 7, Appl1
161	32	76.2	455	2	US-08-635-130A-2	Sequence 2, Appl1	234	29	69.0	215	2	US-09-113-789-7	Sequence 7, Appl1
162	32	76.2	952	2	US-09-107-532A-4706	Sequence 4706, Ap	235	29	69.0	215	2	US-08-543-246B-16	Sequence 16, Appl1
163	31	73.8	18	1	US-09-013-634-4	Sequence 4, Appl1	236	29	69.0	215	2	US-08-543-246B-22	Sequence 22, App
164	31	73.8	28	1	US-07-696-551B-1	Sequence 1, Appl1	237	29	69.0	225	2	US-09-583-110A-3528	Sequence 3528, Ap
165	31	73.8	68	2	US-09-902-540-11170	Sequence 11170, A	238	29	69.0	230	2	US-09-107-433-3086	Sequence 3086, Ap
166	31	73.8	139	2	US-09-328-352-8108	Sequence 8108, Ap	239	29	69.0	231	2	US-09-949-016-8815	Sequence 8815, Ap
167	31	73.8	203	2	US-09-377-399-3	Sequence 3, Appl1	240	29	69.0	231	2	US-09-949-016-8816	Sequence 8816, Ap
168	31	73.8	203	2	US-09-763-063-3	Sequence 3, Appl1	241	29	69.0	233	1	US-08-690-095-8	Sequence 8, Appl1
169	31	73.8	204	2	US-09-448-796A-20355	Sequence 20355, A	242	29	69.0	233	1	US-09-113-789-8	Sequence 8, Appl1
170	31	73.8	206	2	US-09-198-452A-879	Sequence 879, App	243	29	69.0	233	2	US-08-543-246B-2	Sequence 2, Appl1
171	31	73.8	206	2	US-09-438-185A-832	Sequence 832, App	244	29	69.0	233	2	US-08-543-246B-21	Sequence 21, Appl1
172	31	73.8	212	2	US-09-198-452A-305	Sequence 305, App	245	29	69.0	240	2	US-09-543-661A-5483	Sequence 5483, Ap
173	31	73.8	212	2	US-09-438-185A-294	Sequence 294, App	246	29	69.0	249	2	US-09-949-016-11591	Sequence 11591, A

247	29	69.0	249	2	US-09-949-016-11592	Sequence 11592, A	320	28	66.7	30	1	US-08-934-915-53	Sequence 53, Appl
248	29	69.0	251	2	US-09-583-110-3220	Sequence 3220, Ap	321	28	66.7	65	2	US-09-489-847-164	Sequence 164, App
249	29	69.0	254	2	US-09-461-325-333	Sequence 333, App	322	28	66.7	68	2	US-09-270-767-34489	Sequence 34489, A
250	29	69.0	254	2	US-10-012-542-333	Sequence 333, App	323	28	66.7	68	2	US-09-270-767-34489	Sequence 49706, A
251	29	69.0	254	2	US-09-919-039-158	Sequence 158, App	324	28	66.7	71	2	US-09-513-9996-7154	Sequence 7154, Ap
252	29	69.0	254	2	US-10-115-123-333	Sequence 333, App	325	28	66.7	104	2	US-08-387-805-10	Sequence 10, Appl
253	29	69.0	256	2	US-09-134-000C-6788	Sequence 6788, Ap	326	28	66.7	126	2	US-09-328-352-5837	Sequence 5837, Ap
254	29	69.0	258	2	US-09-107-433-4719	Sequence 4719, Ap	327	28	66.7	126	2	US-09-328-352-5837	Sequence 11925, A
255	29	69.0	265	2	US-09-107-532A-6716	Sequence 6716, Ap	328	28	66.7	126	2	US-09-328-352-5837	Sequence 1254, Ap
256	29	69.0	312	2	US-09-461-325-343	Sequence 343, App	329	28	66.7	136	2	US-09-489-039A-11828	Sequence 11828, A
257	29	69.0	312	2	US-10-012-542-343	Sequence 343, App	330	28	66.7	160	2	US-09-673-395A-367	Sequence 367, App
258	29	69.0	312	2	US-10-115-123-343	Sequence 343, App	331	28	66.7	153	2	US-09-252-991A-20933	Sequence 20933, A
259	29	69.0	318	2	US-09-489-039A-10467	Sequence 10467, A	332	28	66.7	155	2	US-09-705-621-7	Sequence 11, Appl
260	29	69.0	323	1	US-08-044-812A-4	Sequence 4, Appl	333	28	66.7	175	2	US-09-902-540-13625	Sequence 10963, A
261	29	69.0	323	1	US-08-475-637-4	Sequence 4, Appl	334	28	66.7	177	2	US-09-902-540-13625	Sequence 10963, A
262	29	69.0	323	1	US-08-706-281A-12	Sequence 12, Appl	335	28	66.7	182	2	US-09-393-634-33	Sequence 33, Appl
263	29	69.0	323	2	US-08-191-359-4	Sequence 4, Appl	336	28	66.7	182	2	US-09-393-634-33	Sequence 8754, Ap
264	29	69.0	323	2	US-09-027-231-12	Sequence 12, Appl	337	28	66.7	182	2	US-09-393-634-33	Sequence 6240, Ap
265	29	69.0	323	2	US-09-353-039-12	Sequence 12, Appl	338	28	66.7	182	2	US-09-393-634-33	Sequence 16007, A
266	29	69.0	323	2	US-09-709-066-2	Sequence 2, Appl	339	28	66.7	205	2	US-08-617-785-16	Sequence 16, Appl
267	29	69.0	344	2	US-09-134-000C-4671	Sequence 4671, Ap	340	28	66.7	210	2	US-09-817-64-16	Sequence 16, Appl
268	29	69.0	346	2	US-09-252-991A-31465	Sequence 31465, A	341	28	66.7	223	2	US-10-166-653-16	Sequence 16, Appl
269	29	69.0	352	2	US-09-029-027B-2	Sequence 2, Appl	342	28	66.7	227	2	US-09-134-001C-4836	Sequence 4836, Ap
270	29	69.0	378	2	US-09-107-532A-3777	Sequence 3777, Ap	343	28	66.7	227	2	US-09-134-001C-4836	Sequence 4836, Ap
271	29	69.0	379	2	US-09-248-796A-17332	Sequence 17332, A	344	28	66.7	227	2	US-09-710-279-2642	Sequence 2642, Ap
272	29	69.0	380	2	US-08-773-870-5	Sequence 5, Appl	345	28	66.7	239	2	US-09-543-681A-6888	Sequence 6888, Ap
273	29	69.0	424	2	US-09-627-376-8	Sequence 8, Appl	346	28	66.7	253	2	US-09-540-336-3014	Sequence 3014, Ap
274	29	69.0	424	2	US-10-047-676B-8	Sequence 2, Appl	347	28	66.7	254	2	US-09-252-991A-28319	Sequence 28319, A
275	29	69.0	443	1	US-08-399-986B-2	Sequence 2, Appl	348	28	66.7	255	2	US-09-252-991A-28400	Sequence 28400, A
276	29	69.0	443	1	US-08-493-754A-2	Sequence 13038, A	349	28	66.7	263	2	US-09-543-681A-7789	Sequence 7789, Ap
277	29	69.0	445	2	US-09-902-540-13038	Sequence 13038, A	350	28	66.7	287	2	US-09-244-984-5	Sequence 5, Appl
278	29	69.0	451	2	US-09-489-039A-8949	Sequence 8949, Ap	351	28	66.7	304	2	US-09-710-279-1652	Sequence 1652, Ap
279	29	69.0	477	2	US-09-252-991A-24172	Sequence 24172, A	352	28	66.7	306	2	US-09-248-796A-20371	Sequence 20371, A
280	29	69.0	480	2	US-09-248-796A-20834	Sequence 20834, A	353	28	66.7	313	2	US-09-198-452A-275	Sequence 275, App
281	29	69.0	485	2	US-09-252-991A-31087	Sequence 31087, A	354	28	66.7	319	2	US-09-248-796A-19399	Sequence 19399, A
282	29	69.0	488	2	US-09-540-236-2681	Sequence 2681, Ap	355	28	66.7	320	2	US-10-104-047-2641	Sequence 2641, Ap
283	29	69.0	493	1	US-07-615-448A-7	Sequence 7, Appl	356	28	66.7	321	2	US-09-438-185A-265	Sequence 265, App
284	29	69.0	493	1	US-08-196-361-7	Sequence 7, Appl	357	28	66.7	322	2	US-09-826-609-5233	Sequence 5233, App
285	29	69.0	493	1	US-08-446-934-7	Sequence 7, Appl	358	28	66.7	328	2	US-09-252-991A-25634	Sequence 25634, A
286	29	69.0	493	1	US-08-448-128-7	Sequence 7, Appl	359	28	66.7	329	2	US-09-071-035-368	Sequence 368, App
287	29	69.0	493	2	US-08-948-703-7	Sequence 7, Appl	360	28	66.7	332	2	US-10-206-576-368	Sequence 368, App
288	29	69.0	506	2	US-09-134-000C-6170	Sequence 6170, Ap	361	28	66.7	333	2	US-09-107-433-3941	Sequence 3941, Ap
289	29	69.0	514	2	US-09-489-039A-11902	Sequence 11502, A	362	28	66.7	343	2	US-09-583-110-671	Sequence 671, Ap
290	29	69.0	575	2	US-09-786-240-14	Sequence 14, Appl	363	28	66.7	347	2	US-09-543-681A-8159	Sequence 8159, Ap
291	29	69.0	601	2	US-09-902-540-11118	Sequence 11118, A	364	28	66.7	347	2	US-09-489-039A-11579	Sequence 11579, A
292	29	69.0	601	2	US-09-902-540-15407	Sequence 15407, A	365	28	66.7	357	2	US-09-071-035-366	Sequence 366, App
293	29	69.0	601	2	US-09-107-532A-6715	Sequence 6715, Ap	366	28	66.7	357	2	US-10-206-576-366	Sequence 366, App
294	29	69.0	703	1	US-08-145-681-6	Sequence 6, Appl	367	28	66.7	358	2	US-09-489-039A-8685	Sequence 8685, Ap
295	29	69.0	703	1	US-08-453-703-6	Sequence 6, Appl	368	28	66.7	359	2	US-09-134-000C-4630	Sequence 4630, Ap
296	29	69.0	703	1	US-08-456-106-6	Sequence 6, Appl	369	28	66.7	360	1	US-08-671-525B-6	Sequence 6, Appl
297	29	69.0	703	2	US-08-456-108-6	Sequence 6, Appl	370	28	66.7	360	1	US-08-672-109B-6	Sequence 6, Appl
298	29	69.0	703	2	US-09-265-577-6	Sequence 6, Appl	371	28	66.7	360	1	US-08-842-045-6	Sequence 6, Appl
299	29	69.0	721	2	US-09-633-739-6	Sequence 6, Appl	372	28	66.7	360	1	US-08-842-045-6	Sequence 6, Appl
300	29	69.0	721	2	US-09-134-000C-5466	Sequence 5466, Ap	373	28	66.7	360	1	US-08-780-749A-1	Sequence 1, Appl
301	29	69.0	752	2	US-09-252-991A-17355	Sequence 17355, A	374	28	66.7	360	1	US-08-628-335B-6	Sequence 6, Appl
302	29	69.0	777	1	US-08-477-396A-4	Sequence 4, Appl	375	28	66.7	360	2	US-08-870-511-1	Sequence 1, Appl
303	29	69.0	777	1	US-08-426-627-4	Sequence 4, Appl	376	28	66.7	360	2	US-09-709-066-4	Sequence 4, Appl
304	29	69.0	779	1	US-08-426-627-24	Sequence 24, Appl	377	28	66.7	380	4	PCT-US91-02660-17	Sequence 17, Appl
305	29	69.0	779	1	US-09-461-912A-39	Sequence 39, Appl	378	28	66.7	387	2	US-09-549-848B-17	Sequence 17, Appl
306	29	69.0	811	1	US-08-426-627-2	Sequence 2, Appl	379	28	66.7	390	2	US-09-688-069-17	Sequence 26009, A
307	29	69.0	811	1	US-08-426-627-22	Sequence 22, Appl	380	28	66.7	390	2	US-09-252-991A-26009	Sequence 5273, Ap
308	29	69.0	836	1	US-08-426-627-6	Sequence 6, Appl	381	28	66.7	390	2	US-09-543-681A-5273	Sequence 5594, Ap
309	29	69.0	837	1	US-08-426-627-23	Sequence 23, Appl	382	28	66.7	393	2	US-09-351-150A-29	Sequence 29, Appl
310	29	69.0	970	2	US-09-795-927-7	Sequence 7, Appl	383	28	66.7	393	2	US-09-134-001C-5594	Sequence 13, Appl
311	29	69.0	1060	2	US-09-489-039A-11403	Sequence 11403, A	384	28	66.7	397	2	US-09-489-039A-13098	Sequence 13098, A
312	29	69.0	1127	2	US-09-902-540-11084	Sequence 11084, A	385	28	66.7	401	2	US-09-543-681A-4678	Sequence 4678, A
313	29	69.0	1259	2	US-09-489-039A-8840	Sequence 8840, Ap	386	28	66.7	401	2	US-09-270-767-48282	Sequence 48282, A
314	29	69.0	1269	4	US-09-902-540-10352	Sequence 10352, A	387	28	66.7	415	2	US-09-252-991A-18282	Sequence 18282, A
315	29	69.0	3079	4	PCT-US94-00198-4	Sequence 4, Appl	388	28	66.7	429	2	US-09-489-039A-13214	Sequence 13214, A
316	29	69.0	3854	2	US-09-949-016-7876	Sequence 7876, Ap	389	28	66.7	442	2	US-09-270-767-45937	Sequence 45937, A
317	28	66.7	9	2	US-10-365-908-22	Sequence 22, Appl	390	28	66.7	452	2	US-09-902-540-12747	Sequence 12747, A
318	28	66.7	10	2	US-10-365-908-42	Sequence 42, Appl	391	28	66.7	457	2	US-09-543-681A-6481	Sequence 6481, Ap
319	28	66.7	11	2	US-10-365-908-39	Sequence 39, Appl	392	28	66.7	464	2	US-09-634-238-295	Sequence 295, App

393	28	66.7	479	2	US-09-634-238-248	Sequence 248, App	466	28	66.7	1225	2	US-09-583-110-3637	Sequence 3637, Ap
394	28	66.7	480	1	US-07-752-4296-2	Sequence 2, Appl1	467	28	66.7	1239	2	US-09-107-433-4267	Sequence 4267, Ap
395	28	66.7	480	1	US-07-752-4282-2	Sequence 2, Appl1	468	28	66.7	1402	2	US-09-711-618-9	Sequence 9, Appl1
396	28	66.7	480	1	US-07-752-428C-4	Sequence 4, Appl1	469	28	66.7	2162	2	US-09-477-962-97	Sequence 97, Appl1
397	28	66.7	481	2	US-09-489-039A-7588	Sequence 7588, Ap	470	28	66.7	2254	1	US-08-677-010-3	Sequence 3, Appl1
398	28	66.7	482	2	US-09-489-039A-9909	Sequence 9909, Ap	471	28	66.7	2254	1	US-08-677-010-3	Sequence 3, Appl1
399	28	66.7	483	2	US-09-949-016-7399	Sequence 7399, Ap	472	27	64.3	10	2	US-08-159-339A-771	Sequence 771, App
400	28	66.7	487	2	US-09-902-540-10085	Sequence 10085, A	473	27	64.3	18	1	US-08-818-253-56	Sequence 56, Appl1
401	28	66.7	502	2	US-09-352-991A-24948	Sequence 24948, A	474	27	64.3	18	1	US-08-818-253-61	Sequence 61, Appl1
402	28	66.7	506	2	US-09-543-681A-8246	Sequence 8246, Ap	475	27	64.3	18	2	US-08-818-252-56	Sequence 56, Appl1
403	28	66.7	518	2	US-09-270-767-57124	Sequence 57124, A	476	27	64.3	1	2	US-09-301-593-61	Sequence 61, Appl1
404	28	66.7	530	2	US-09-198-452A-482	Sequence 482, App	477	27	64.3	44	1	US-08-363-311-29	Sequence 29, Appl1
405	28	66.7	535	2	US-08-286-870A-6	Sequence 6, Appl1	478	27	64.3	44	1	US-08-463-288A-29	Sequence 29, Appl1
406	28	66.7	535	2	US-09-712-363-228	Sequence 228, Appl1	479	27	64.3	44	1	US-08-470-445A-29	Sequence 29, Appl1
407	28	66.7	536	2	US-09-328-352-4689	Sequence 4689, Ap	480	27	64.3	44	1	US-08-462-679-29	Sequence 29, Appl1
408	28	66.7	555	2	US-09-543-681A-63772	Sequence 6372, App	481	27	64.3	44	1	US-08-466-210A-29	Sequence 29, Appl1
409	28	66.7	562	2	US-09-674-826B-4	Sequence 4, Appl1	482	27	64.3	44	1	US-08-467-147A-29	Sequence 29, Appl1
410	28	66.7	573	2	US-09-352-991A-18744	Sequence 18744, A	483	27	64.3	44	1	US-08-469-014-29	Sequence 29, Appl1
411	28	66.7	585	2	US-09-352-991A-32406	Sequence 32406, A	484	27	64.3	44	2	US-09-346-290-29	Sequence 29, Appl1
412	28	66.7	609	2	US-09-370-767-41879	Sequence 41879, A	485	27	64.3	44	4	PCT-US93-1056A-29	Sequence 29, Appl1
413	28	66.7	628	2	US-09-602-787A-550	Sequence 550, App	486	27	64.3	44	4	PCT-US93-1056A-28	Sequence 29, Appl1
414	28	66.7	628	2	US-09-602-787A-666	Sequence 666, App	487	27	64.3	53	2	US-09-513-993C-4522	Sequence 4522, Ap
415	28	66.7	628	2	US-09-477-962-105	Sequence 105, App	488	27	64.3	65	2	US-09-583-110-2866	Sequence 2866, Ap
416	28	66.7	648	2	US-08-386-870A-4	Sequence 4, Appl1	489	27	64.3	69	2	US-09-489-039A-13262	Sequence 13262, A
417	28	66.7	662	2	US-09-134-001C-4074	Sequence 4074, Ap	490	27	64.3	76	2	US-09-107-433-3897	Sequence 3897, Ap
418	28	66.7	681	1	US-08-655-345-4	Sequence 4, Appl1	491	27	64.3	82	2	US-09-902-540-14531	Sequence 14531, A
419	28	66.7	681	2	US-09-183-875-4	Sequence 4, Appl1	492	27	64.3	88	2	US-08-936-165A-275	Sequence 275, App
420	28	66.7	681	2	US-09-248-796A-20121	Sequence 20121, A	493	27	64.3	90	1	US-08-341-218-24	Sequence 24, Appl1
421	28	66.7	681	4	PCT-US96-08407-4	Sequence 4, Appl1	494	27	64.3	90	2	US-08-912-314A-24	Sequence 24, Appl1
422	28	66.7	681	4	US-09-902-540-10726	Sequence 10726, A	495	27	64.3	92	2	US-09-248-796A-16168	Sequence 16168, A
423	28	66.7	684	2	US-09-949-016-7019	Sequence 7019, Ap	496	27	64.3	93	1	US-08-964-725-14	Sequence 14, Appl1
424	28	66.7	688	2	US-09-127-169-4	Sequence 4, Appl1	497	27	64.3	93	2	US-10-081-812A-32	Sequence 32, Appl1
425	28	66.7	698	2	US-09-579-766A-4	Sequence 4, Appl1	498	27	64.3	97	2	US-09-248-796A-16783	Sequence 16783, A
426	28	66.7	698	2	US-09-726-968-4	Sequence 4, Appl1	499	27	64.3	99	2	US-09-513-993C-4517	Sequence 4517, Ap
427	28	66.7	703	2	US-08-910-925-4	Sequence 4, Appl1	500	27	64.3	106	2	US-09-543-681A-7781	Sequence 7781, Ap
428	28	66.7	706	2	US-09-902-540-12578	Sequence 12578, A	501	27	64.3	123	2	US-09-107-532A-5779	Sequence 5779, Ap
429	28	66.7	710	2	US-09-547-789-2	Sequence 2, Appl1	502	27	64.3	128	2	US-09-134-000C-5387	Sequence 5387, Ap
430	28	66.7	717	2	US-08-910-925-1	Sequence 1, Appl1	503	27	64.3	130	2	US-08-838-682-4	Sequence 4, Appl1
431	28	66.7	719	1	US-09-003-817-2	Sequence 2, Appl1	504	27	64.3	130	2	US-08-895-914-4	Sequence 4, Appl1
432	28	66.7	719	1	US-08-286-870A-8	Sequence 8, Appl1	505	27	64.3	130	2	US-09-357-710A-4	Sequence 4, Appl1
433	28	66.7	719	2	US-09-218-942-2	Sequence 2, Appl1	506	27	64.3	130	2	US-09-357-707-4	Sequence 4, Appl1
434	28	66.7	743	2	US-08-910-925-3	Sequence 3, Appl1	507	27	64.3	130	2	US-09-357-708-4	Sequence 4, Appl1
435	28	66.7	743	2	US-09-949-016-6261	Sequence 6261, Ap	508	27	64.3	137	1	US-08-116-776B-3	Sequence 3, Appl1
436	28	66.7	765	2	US-08-737-109-11	Sequence 11, Appl1	509	27	64.3	137	1	US-08-438-562-3	Sequence 3, Appl1
437	28	66.7	807	1	US-08-655-345-2	Sequence 2, Appl1	510	27	64.3	137	1	US-08-483-528B-93	Sequence 93, Appl1
438	28	66.7	807	2	US-09-183-275-2	Sequence 2, Appl1	511	27	64.3	137	2	US-09-902-540-13184	Sequence 13184, A
439	28	66.7	807	4	PCT-US96-08407-2	Sequence 2, Appl1	512	27	64.3	138	2	US-09-328-352-8007	Sequence 8007, Ap
440	28	66.7	810	2	US-09-949-016-7737	Sequence 7737, Ap	513	27	64.3	139	1	US-08-116-778B-1	Sequence 1, Appl1
441	28	66.7	810	2	US-09-949-016-7738	Sequence 7738, Ap	514	27	64.3	139	1	US-08-438-562-1	Sequence 1, Appl1
442	28	66.7	824	2	US-09-727-169-2	Sequence 2, Appl1	515	27	64.3	139	1	US-08-483-528B-91	Sequence 91, Appl1
443	28	66.7	824	2	US-09-579-766A-2	Sequence 2, Appl1	516	27	64.3	143	2	US-09-301-593-26	Sequence 26, Appl1
444	28	66.7	824	2	US-09-726-968-2	Sequence 2, Appl1	517	27	64.3	144	1	US-08-116-778B-36	Sequence 36, Appl1
445	28	66.7	837	2	US-09-252-991A-26362	Sequence 26362, A	518	27	64.3	144	1	US-08-438-562-36	Sequence 36, Appl1
446	28	66.7	841	2	US-10-332-795-11	Sequence 11, Appl1	519	27	64.3	144	1	US-08-483-528B-100	Sequence 100, App
447	28	66.7	841	2	US-09-897-427A-2	Sequence 2, Appl1	520	27	64.3	144	2	US-09-393-385B-112	Sequence 112, App
448	28	66.7	861	1	US-08-346-435B-67	Sequence 67, Appl1	521	27	64.3	144	2	US-09-352-991A-26473	Sequence 26473, A
449	28	66.7	861	1	US-08-977-221-67	Sequence 67, Appl1	522	27	64.3	144	2	US-10-193-753-112	Sequence 112, App
450	28	66.7	861	2	US-09-483-831B-67	Sequence 67, Appl1	523	27	64.3	149	2	US-09-543-681A-6894	Sequence 6894, Ap
451	28	66.7	861	4	PCT-US95-06613-67	Sequence 67, Appl1	524	27	64.3	154	2	US-09-248-796A-14178	Sequence 14178, A
452	28	66.7	877	1	US-08-407-875-2	Sequence 2, Appl1	525	27	64.3	157	2	US-09-270-767-57456	Sequence 57456, A
453	28	66.7	877	2	US-09-126-800-2	Sequence 2, Appl1	526	27	64.3	162	2	US-09-902-540-10362	Sequence 10362, A
454	28	66.7	877	2	US-09-377-858-2	Sequence 2, Appl1	527	27	64.3	174	2	US-09-489-039A-12009	Sequence 12009, A
455	28	66.7	934	2	US-09-949-016-8012	Sequence 8012, Ap	528	27	64.3	177	2	US-09-673-763-2	Sequence 2, Appl1
456	28	66.7	934	2	US-09-949-016-8013	Sequence 8013, Ap	529	27	64.3	179	2	US-09-902-540-13028	Sequence 13028, A
457	28	66.7	934	2	US-09-430-723-2	Sequence 2, Appl1	530	27	64.3	183	2	US-10-101-464A-659	Sequence 659, App
458	28	66.7	999	2	US-09-438-185A-455	Sequence 455, App	531	27	64.3	185	2	US-09-949-016-6220	Sequence 6220, Ap
459	28	66.7	1040	2	US-09-489-039A-10700	Sequence 10700, A	532	27	64.3	191	2	US-09-710-279-638	Sequence 638, App
460	28	66.7	1047	2	US-09-543-681A-6186	Sequence 6186, Ap	533	27	64.3	194	2	US-09-830-230A-406	Sequence 406, App
461	28	66.7	1051	2	US-09-252-991A-16989	Sequence 16989, A	534	27	64.3	196	2	US-09-134-000C-6277	Sequence 6277, Ap
462	28	66.7	1066	1	US-08-633-770A-1	Sequence 1, Appl1	535	27	64.3	201	1	US-08-688-342-1	Sequence 1, Appl1
463	28	66.7	1066	2	US-09-280-197-5	Sequence 5, Appl1	536	27	64.3	201	1	US-09-113-788-1	Sequence 1, Appl1
464	28	66.7	1066	2	US-09-423-126-3	Sequence 3, Appl1	537	27	64.3	201	2	US-09-902-540-13645	Sequence 13645, A
465	28	66.7	1167	2	US-09-661-322A-40	Sequence 40, Appl1	538	27	64.3	201	2	US-09-999-833A-477	Sequence 477, App

539	27	64.3	201	2	US-10-020-445A-477	Sequence 477, App	612	27	64.3	363	2	US-09-248-796A-17135	Sequence 17135, A
540	27	64.3	208	2	US-09-328-352-5212	Sequence 5212, Ap	613	27	64.3	375	2	US-09-489-039A-11560	Sequence 11560, A
541	27	64.3	208	2	US-09-991-181-416	Sequence 416, App	614	27	64.3	378	2	US-09-248-796A-20843	Sequence 20843, A
542	27	64.3	208	2	US-09-990-444-416	Sequence 416, App	615	27	64.3	379	2	US-09-252-991A-26683	Sequence 26683, A
543	27	64.3	208	2	US-09-832-129-36	Sequence 36, Appl	616	27	64.3	385	2	US-09-711-164-393	Sequence 393, App
544	27	64.3	208	2	US-09-997-333-416	Sequence 416, App	617	27	64.3	388	2	US-09-252-991A-30849	Sequence 30849, A
545	27	64.3	208	2	US-09-992-598-416	Sequence 416, App	618	27	64.3	393	2	US-09-252-991A-17091	Sequence 17091, A
546	27	64.3	209	2	US-08-914-999-14	Sequence 14, Appl	619	27	64.3	396	2	US-09-252-991A-31085	Sequence 31085, A
547	27	64.3	209	2	US-09-902-540-11629	Sequence 11629, A	620	27	64.3	397	2	US-09-352-991A-10356	Sequence 10356, A
548	27	64.3	217	2	US-09-489-039A-8076	Sequence 8076, Ap	621	27	64.3	403	2	US-09-902-540-11529	Sequence 11529, A
549	27	64.3	220	2	US-09-134-000C-5659	Sequence 5659, Ap	622	27	64.3	404	2	US-08-911-853-9	Sequence 9, Appl1
550	27	64.3	223	2	US-09-489-039A-8078	Sequence 8078, Ap	623	27	64.3	404	2	US-09-479-409-9	Sequence 9, Appl1
551	27	64.3	224	2	US-09-949-016-8454	Sequence 8454, Ap	624	27	64.3	404	2	US-09-479-409-9	Sequence 9, Appl1
552	27	64.3	227	1	US-08-597-236-6	Sequence 6, Appl1	625	27	64.3	409	2	US-09-583-110-3749	Sequence 3749, Ap
553	27	64.3	227	1	US-08-746-682A-6	Sequence 6, Appl1	626	27	64.3	410	2	US-09-107-633-2887	Sequence 2887, Ap
554	27	64.3	231	2	US-09-333-809-218	Sequence 218, App	627	27	64.3	416	2	US-09-828-000-2	Sequence 2, Appl1
555	27	64.3	231	2	US-09-333-809-219	Sequence 219, App	628	27	64.3	416	2	US-09-358-092-1023	Sequence 36, Appl
556	27	64.3	231	2	US-09-333-809-220	Sequence 220, App	629	27	64.3	417	2	US-09-906-393A-36	Sequence 2, Appl1
557	27	64.3	231	2	US-09-746-311B-367	Sequence 367, App	630	27	64.3	417	2	US-09-807-148-2	Sequence 5459, Ap
558	27	64.3	231	2	US-09-746-311B-368	Sequence 368, App	631	27	64.3	424	2	US-09-107-532A-5459	Sequence 8376, Ap
559	27	64.3	231	2	US-09-746-311B-369	Sequence 369, App	632	27	64.3	426	2	US-09-949-016-8376	Sequence 7392, Ap
560	27	64.3	232	2	US-09-333-809-215	Sequence 215, App	633	27	64.3	431	2	US-09-328-352-7392	Sequence 70, Appl
561	27	64.3	232	2	US-09-333-809-216	Sequence 216, App	634	27	64.3	433	2	US-10-272-490-70	Sequence 24980, A
562	27	64.3	232	2	US-09-333-809-217	Sequence 217, App	635	27	64.3	434	2	US-09-252-991A-19792	Sequence 19792, A
563	27	64.3	232	2	US-09-746-311B-363	Sequence 363, App	636	27	64.3	436	2	US-09-252-991A-24980	Sequence 8958, Ap
564	27	64.3	232	2	US-09-746-311B-364	Sequence 364, App	637	27	64.3	441	2	US-09-489-039A-8958	Sequence 2, Appl1
565	27	64.3	232	2	US-09-746-311B-365	Sequence 365, App	638	27	64.3	445	2	US-09-950-071-2	Sequence 28655, A
566	27	64.3	232	2	US-09-746-311B-366	Sequence 366, App	639	27	64.3	445	2	US-09-252-991A-28655	Sequence 1, Appl1
567	27	64.3	232	2	US-09-830-230A-405	Sequence 405, App	640	27	64.3	446	2	US-09-489-039A-9942	Sequence 13449, A
568	27	64.3	232	2	US-09-252-991A-23362	Sequence 23362, A	641	27	64.3	455	2	US-09-642-703-1	Sequence 8, Appl1
569	27	64.3	235	2	US-09-583-110-4058	Sequence 4058, A	642	27	64.3	455	2	US-09-902-540-13449	Sequence 6023, App
570	27	64.3	236	2	US-09-902-540-12590	Sequence 12590, A	643	27	64.3	461	2	US-09-270-767-45915	Sequence 17157, A
571	27	64.3	237	2	US-09-489-039A-7234	Sequence 7234, A	644	27	64.3	462	2	US-09-173-151A-8	Sequence 20403, A
572	27	64.3	237	2	US-09-902-540-10859	Sequence 10859, A	645	27	64.3	467	2	US-09-328-352-6023	Sequence 7062, App
573	27	64.3	238	2	US-09-270-767-41602	Sequence 41602, A	646	27	64.3	468	2	US-09-902-540-13448	Sequence 1588, A
574	27	64.3	243	2	US-09-270-767-41602	Sequence 2190, A	647	27	64.3	470	2	US-09-328-352-6912	Sequence 945, App
575	27	64.3	246	1	US-08-867-087B-17	Sequence 17, Appl	648	27	64.3	470	2	US-09-489-039A-9853	Sequence 326, App
576	27	64.3	248	2	US-09-134-000C-4602	Sequence 4602, App	649	27	64.3	472	2	US-09-301-593-30	Sequence 8407, App
577	27	64.3	250	2	US-09-543-681A-6860	Sequence 6860, App	650	27	64.3	474	2	US-09-543-681A-6873	Sequence 17058, A
578	27	64.3	254	2	US-10-000-489-40	Sequence 40, Appl	651	27	64.3	474	2	US-09-902-540-15745	Sequence 10041, A
579	27	64.3	263	2	US-08-430-225A-20	Sequence 20, Appl	652	27	64.3	481	2	US-09-252-991A-27157	Sequence 3533, App
580	27	64.3	267	2	US-09-071-035-154	Sequence 154, App	653	27	64.3	492	2	US-09-252-991A-20403	Sequence 15103, A
581	27	64.3	267	2	US-09-795-380-20	Sequence 20, Appl	654	27	64.3	492	2	US-09-107-532A-7062	Sequence 29617, A
582	27	64.3	267	2	US-10-206-576-154	Sequence 154, App	655	27	64.3	494	2	US-09-902-540-15103	Sequence 9274, App
583	27	64.3	270	2	US-09-270-767-42186	Sequence 42186, A	656	27	64.3	498	1	US-08-660-963-12	Sequence 15, Appl
584	27	64.3	270	2	US-09-252-991A-23450	Sequence 23450, A	657	27	64.3	502	2	US-10-101-464A-945	Sequence 15, Appl
585	27	64.3	271	6	5175255-1	Patent No. 5175255	658	27	64.3	502	2	US-08-484-991A-15	Sequence 15, Appl
586	27	64.3	271	6	5175255-1	Patent No. 5175255	659	27	64.3	514	2	US-08-484-991A-15	Sequence 15, Appl
587	27	64.3	273	2	US-09-673-763-14	Sequence 14, Appl	660	27	64.3	514	2	US-08-484-991A-15	Sequence 15, Appl
588	27	64.3	277	2	US-09-134-001C-5558	Sequence 5558, App	661	27	64.3	518	2	US-09-252-991A-17058	Sequence 17058, A
589	27	64.3	278	2	US-09-134-000C-5301	Sequence 5301, App	662	27	64.3	520	2	US-09-489-039A-8407	Sequence 8407, App
590	27	64.3	281	2	US-09-252-991A-22644	Sequence 22644, A	663	27	64.3	522	2	US-09-249-003-15	Sequence 15, Appl
591	27	64.3	281	2	US-09-270-767-42260	Sequence 42260, A	664	27	64.3	524	2	US-09-134-001C-3353	Sequence 3353, App
592	27	64.3	288	2	US-09-134-000C-6445	Sequence 6445, App	665	27	64.3	525	2	US-09-902-540-15103	Sequence 15103, A
593	27	64.3	289	2	US-09-134-000C-5932	Sequence 5932, App	666	27	64.3	529	2	US-09-252-991A-28803	Sequence 28803, A
594	27	64.3	291	6	5194600-2	Patent No. 5194600	667	27	64.3	531	1	US-08-484-991A-15	Sequence 15, Appl
595	27	64.3	299	2	US-09-902-540-12051	Sequence 12051, A	668	27	64.3	551	1	US-08-484-991A-15	Sequence 15, Appl
596	27	64.3	304	2	US-09-328-352-7098	Sequence 7098, App	669	27	64.3	551	1	US-08-345-212-15	Sequence 15, Appl
597	27	64.3	305	2	US-09-328-352-5552	Sequence 5352, App	670	27	64.3	551	1	US-09-249-003-15	Sequence 15, Appl
598	27	64.3	310	2	US-09-543-681A-8289	Sequence 8289, App	671	27	64.3	551	2	US-09-685-844-15	Sequence 28803, A
599	27	64.3	316	1	US-08-846-762-9	Sequence 9, Appl1	672	27	64.3	555	2	US-09-252-991A-28803	Sequence 31651, A
600	27	64.3	323	2	US-09-134-000C-3967	Sequence 3967, App	673	27	64.3	574	2	US-09-252-991A-31651	Sequence 9274, App
601	27	64.3	329	2	US-09-198-452A-564	Sequence 564, App	674	27	64.3	582	2	US-09-949-016-8274	Sequence 9, Appl1
602	27	64.3	329	2	US-09-134-001C-3165	Sequence 3165, App	675	27	64.3	592	2	US-09-934-868A-4	Sequence 4, Appl1
603	27	64.3	335	2	US-09-107-532A-6832	Sequence 6832, App	676	27	64.3	592	2	US-10-320-874-14	Sequence 14, Appl
604	27	64.3	336	2	US-09-830-230A-389	Sequence 389, App	677	27	64.3	592	2	US-10-320-874-14	Sequence 14, Appl
605	27	64.3	339	2	US-09-902-540-15220	Sequence 15220, A	678	27	64.3	592	2	US-10-320-874-14	Sequence 14, Appl
606	27	64.3	340	2	US-09-902-540-12982	Sequence 12982, A	679	27	64.3	592	2	US-10-320-874-14	Sequence 14, Appl
607	27	64.3	343	2	US-09-328-352-6577	Sequence 6577, App	680	27	64.3	594	2	US-09-468-578-2	Sequence 2, Appl1
608	27	64.3	344	2	US-09-107-532A-5049	Sequence 5049, App	681	27	64.3	594	2	US-09-218-702-2	Sequence 2, Appl1
609	27	64.3	354	2	US-09-438-185A-528	Sequence 528, App	682	27	64.3	594	2	US-09-868-839-2	Sequence 2, Appl1
610	27	64.3	360	1	US-08-597-236-11	Sequence 11, Appl	683	27	64.3	597	2	US-09-949-016-7719	Sequence 7719, App
611	27	64.3	360	1	US-08-746-682A-11	Sequence 11, Appl	684	27	64.3				

685	27	64.3	539	2	US-09-173-151A-10	Sequence 10, Appl	758	26	61.9	83	1	US-08-928-692-64	Sequence 64, Appl
686	27	64.3	539	2	US-09-621-502-2	Sequence 2, Appl1	759	26	61.9	83	1	US-08-928-692-65	Sequence 65, Appl
687	27	64.3	539	2	US-09-616-530A-7	Sequence 7, Appl1	760	26	61.9	83	2	US-09-339-972-64	Sequence 64, Appl
688	27	64.3	539	2	US-10-212-356A-7	Sequence 7, Appl1	761	26	61.9	83	2	US-09-339-972-65	Sequence 65, Appl
689	27	64.3	539	2	US-10-212-287-7	Sequence 7, Appl1	762	26	61.9	83	2	US-09-248-796A-24763	Sequence 24763, A
690	27	64.3	539	2	US-09-949-002-358	Sequence 358, App	763	26	61.9	85	2	US-09-369-247-172	Sequence 172, App
691	27	64.3	601	2	US-09-252-991A-31225	Sequence 31225, A	764	26	61.9	85	2	US-10-062-848A-172	Sequence 172, App
692	27	64.3	605	2	US-09-949-002-490	Sequence 490, App	765	26	61.9	97	2	US-09-328-352-812	Sequence 812, App
693	27	64.3	605	2	US-09-252-991A-20268	Sequence 20268, A	766	26	61.9	100	2	US-08-928-692-64	Sequence 812, App
694	27	64.3	651	2	US-09-252-991A-18065	Sequence 18065, A	767	26	61.9	101	2	US-08-894-173-90	Sequence 90, Appl
695	27	64.3	661	1	US-08-399-986B-5	Sequence 5, Appl1	768	26	61.9	101	2	US-09-398-193-90	Sequence 90, Appl
696	27	64.3	661	1	US-08-493-754A-5	Sequence 5, Appl1	769	26	61.9	102	2	US-09-818-236A-6	Sequence 6, Appl1
697	27	64.3	664	1	US-09-252-991A-25036	Sequence 25036, A	770	26	61.9	102	2	US-09-902-540-15631	Sequence 15631, A
698	27	64.3	664	2	US-09-252-991A-31745	Sequence 31745, A	771	26	61.9	105	2	US-09-513-999C-4247	Sequence 4247, App
699	27	64.3	702	2	US-09-328-352-4189	Sequence 4189, App	772	26	61.9	105	2	US-09-471-276-902	Sequence 902, App
700	27	64.3	707	2	US-09-902-540-14788	Sequence 14788, A	773	26	61.9	108	2	US-09-640-211A-1174	Sequence 1174, App
701	27	64.3	708	2	US-09-252-991A-32082	Sequence 32082, A	774	26	61.9	110	2	US-09-107-532A-4192	Sequence 4192, App
702	27	64.3	810	2	US-09-902-540-12414	Sequence 12414, A	775	26	61.9	113	2	US-08-905-223-439	Sequence 33931, A
703	27	64.3	811	2	US-09-902-540-15368	Sequence 15368, A	776	26	61.9	115	2	US-09-270-767-48538	Sequence 48538, A
704	27	64.3	830	2	US-09-252-991A-22004	Sequence 22004, A	777	26	61.9	115	2	US-08-702-344-21	Sequence 21, Appl
705	27	64.3	844	2	US-09-902-540-12865	Sequence 12865, A	778	26	61.9	116	2	US-09-902-540-16664	Sequence 16664, A
706	27	64.3	915	2	US-09-252-991A-23779	Sequence 23779, A	779	26	61.9	121	2	US-09-489-039A-7487	Sequence 7487, App
707	27	64.3	984	1	US-08-242-932-2	Sequence 2, Appl1	780	26	61.9	123	2	US-08-434-000A-14	Sequence 14, Appl
708	27	64.3	984	1	US-08-714-481-2	Sequence 2, Appl1	781	26	61.9	132	2	US-09-312-157-14	Sequence 14, Appl
709	27	64.3	984	4	PCT-US95-06111-2	Sequence 36, Appl	782	26	61.9	132	2	US-09-717-888-14	Sequence 14, Appl
710	27	64.3	1007	2	US-10-144-198-36	Sequence 36, Appl	783	26	61.9	132	2	US-09-270-767-44213	Sequence 44213, A
711	27	64.3	1032	2	US-09-733-643B-16	Sequence 16, Appl	784	26	61.9	133	2	US-09-270-767-55636	Sequence 55636, A
712	27	64.3	1041	2	US-10-144-198-14	Sequence 14, Appl	785	26	61.9	135	1	US-07-634-278-69	Sequence 19, Appl
713	27	64.3	1054	2	US-09-949-016-9821	Sequence 9821, App	786	26	61.9	135	1	US-07-634-278-69	Sequence 69, Appl
714	27	64.3	1054	2	US-09-949-016-9822	Sequence 9822, App	787	26	61.9	135	1	US-08-477-728-19	Sequence 19, Appl
715	27	64.3	1081	1	US-08-843-330B-18	Sequence 18, Appl	788	26	61.9	135	1	US-08-477-728-69	Sequence 69, Appl
716	27	64.3	1081	2	US-09-636-128-17	Sequence 17, Appl	789	26	61.9	135	1	US-08-474-040-19	Sequence 19, Appl
717	27	64.3	1081	2	US-09-424-951-4	Sequence 4, Appl1	790	26	61.9	135	1	US-08-474-040-19	Sequence 19, Appl
718	27	64.3	1092	2	US-09-543-681A-7058	Sequence 7058, App	791	26	61.9	135	1	US-08-487-200-19	Sequence 19, Appl
719	27	64.3	1117	2	US-08-843-530B-33	Sequence 33, Appl	792	26	61.9	135	1	US-08-487-200-19	Sequence 69, Appl
720	27	64.3	1117	2	US-09-923-992A-6	Sequence 6, Appl1	793	26	61.9	135	1	US-08-487-200-69	Sequence 27, Appl
721	27	64.3	1128	2	US-08-923-992A-5	Sequence 2, Appl1	794	26	61.9	135	1	US-08-436-717-27	Sequence 27, Appl
722	27	64.3	1164	2	US-08-923-992A-2	Sequence 2, Appl1	795	26	61.9	135	1	US-08-303-568B-31	Sequence 31, Appl
723	27	64.3	1164	2	US-08-923-992A-10	Sequence 10, Appl	796	26	61.9	135	1	US-08-621-751A-16	Sequence 16, Appl
724	27	64.3	1198	2	US-09-199-637A-405	Sequence 9, Appl1	797	26	61.9	135	2	US-08-484-537-19	Sequence 19, Appl
725	27	64.3	1250	1	US-08-441-139-9	Sequence 9, Appl1	798	26	61.9	135	2	US-08-484-537-69	Sequence 69, Appl
726	27	64.3	1250	2	US-09-487-558B-364	Sequence 364, App	799	26	61.9	136	2	US-08-525-539A-47	Sequence 47, Appl
727	27	64.3	1251	2	US-09-248-796A-16620	Sequence 16620, A	800	26	61.9	136	2	US-08-525-539A-63	Sequence 63, Appl
728	27	64.3	1261	2	US-09-357-251-33	Sequence 33, Appl	801	26	61.9	136	2	US-09-450-520A-8	Sequence 8, Appl1
729	27	64.3	1262	2	US-09-949-016-6182	Sequence 6182, App	802	26	61.9	136	2	PCT-US93-11611-11	Sequence 11, Appl
730	27	64.3	1262	2	US-09-949-016-6850	Sequence 6850, App	803	26	61.9	136	4	US-08-392-419-2	Sequence 2, Appl1
731	27	64.3	1266	2	US-08-468-557-4	Sequence 4, Appl1	804	26	61.9	137	2	US-08-444-644-17	Sequence 17, Appl
732	27	64.3	1266	2	US-09-357-251-32	Sequence 32, Appl	805	26	61.9	137	2	US-08-232-246A-17	Sequence 17, Appl
733	27	64.3	1477	2	US-09-830-230A-414	Sequence 414, App	806	26	61.9	137	2	US-09-647-468-153	Sequence 153, App
734	27	64.3	1494	2	US-09-830-230A-413	Sequence 413, App	807	26	61.9	137	2	US-09-647-468-154	Sequence 154, App
735	27	64.3	1498	2	US-09-792-616-9	Sequence 9, Appl1	808	26	61.9	137	2	US-09-647-468-157	Sequence 157, App
736	27	64.3	1861	1	US-08-790-912-6	Sequence 6, Appl1	809	26	61.9	137	2	US-09-647-468-157	Sequence 158, App
737	27	64.3	2146	2	US-09-949-016-6947	Sequence 6947, App	810	26	61.9	138	1	US-07-634-278-85	Sequence 85, Appl
738	27	64.3	4545	1	US-08-804-227C-14	Sequence 14, Appl	811	26	61.9	138	1	US-08-477-728-85	Sequence 85, Appl
739	27	64.3	4550	1	US-08-804-227C-8	Sequence 8, Appl1	812	26	61.9	138	1	US-08-474-040-85	Sequence 85, Appl
740	27	64.3	4550	1	US-08-804-198-2	Sequence 2, Appl1	813	26	61.9	138	1	US-08-484-537-85	Sequence 85, Appl
741	26	61.9	9	2	US-08-159-339A-769	Sequence 769, App	814	26	61.9	138	1	US-08-202-047-3	Sequence 3, Appl1
742	26	61.9	19	2	US-08-525-539A-69	Sequence 69, Appl	815	26	61.9	138	1	US-08-836-561-63	Sequence 63, Appl
743	26	61.9	32	2	US-09-612-925H-7	Sequence 7, Appl1	816	26	61.9	139	1	US-08-836-561-63	Sequence 63, Appl
744	26	61.9	40	1	US-08-472-244-3	Sequence 3, Appl1	817	26	61.9	139	1	US-08-836-561-63	Sequence 63, Appl
745	26	61.9	40	2	US-09-205-258-284	Sequence 284, App	818	26	61.9	139	2	US-08-964-690-3	Sequence 3, Appl1
746	26	61.9	40	2	US-10-004-860-284	Sequence 284, App	819	26	61.9	139	2	US-09-710-279-2992	Sequence 2992, App
747	26	61.9	47	1	US-08-994-189-15	Sequence 15, Appl	820	26	61.9	140	2	US-08-836-561-63	Sequence 63, Appl
748	26	61.9	50	2	US-09-369-247-102	Sequence 102, App	821	26	61.9	140	2	US-08-836-561-63	Sequence 63, Appl
749	26	61.9	50	2	US-10-062-548-102	Sequence 102, App	822	26	61.9	140	2	US-08-836-561-74	Sequence 74, Appl
750	26	61.9	60	2	US-09-513-999C-5989	Sequence 5989, App	823	26	61.9	140	2	US-08-836-561-83	Sequence 83, Appl
751	26	61.9	61	2	US-09-248-796A-21150	Sequence 21150, A	824	26	61.9	140	2	US-08-579-379A-4	Sequence 27, Appl
752	26	61.9	63	2	US-09-540-236-2004	Sequence 2004, App	825	26	61.9	140	2	US-09-434-122-27	Sequence 27, Appl
753	26	61.9	63	2	US-09-540-236-2705	Sequence 2705, App	826	26	61.9	140	2	US-09-434-122-63	Sequence 63, Appl
754	26	61.9	64	2	US-09-621-976-6862	Sequence 6862, App	827	26	61.9	140	2	US-09-434-122-74	Sequence 74, Appl
755	26	61.9	64	2	US-08-302-756B-14	Sequence 14, Appl	828	26	61.9	140	2	US-09-434-122-78	Sequence 78, Appl
756	26	61.9	68	2	US-09-188-930-123	Sequence 123, App	829	26	61.9	140	2	US-09-434-122-83	Sequence 83, Appl
757	26	61.9	68	2	US-09-312-283C-123	Sequence 123, App	830	26	61.9	140	2	US-09-434-122-83	Sequence 83, Appl

831	26	61.9	140	4	PCT-US93-11612-4	Sequence 4, Appli	904	26	61.9	235	2	US-08-232-246A-28	Sequence 28, Appli
832	26	61.9	142	2	US-09-270-767-40995	Sequence 40995, A	905	26	61.9	235	2	US-08-232-246A-42	Sequence 42, Appli
833	26	61.9	143	2	US-09-270-767-56211	Sequence 56211, A	906	26	61.9	236	2	US-09-107-532A-6321	Sequence 6321, Ap
834	26	61.9	142	2	US-09-270-767-60062	Sequence 60062, A	907	26	61.9	236	2	US-09-902-540-13257	Sequence 13257, A
835	26	61.9	146	2	US-09-270-767-32099	Sequence 32099, A	908	26	61.9	237	2	US-09-543-681A-3533	Sequence 5353, Ap
836	26	61.9	146	2	US-09-270-767-47316	Sequence 47316, A	909	26	61.9	241	2	US-09-134-000C-35623	Sequence 3623, Ap
837	26	61.9	147	1	US-08-264-003B-2	Sequence 2, Appli	910	26	61.9	247	2	US-09-252-991A-24999	Sequence 24999, A
838	26	61.9	147	1	US-08-959-865-3	Sequence 3, Appli	911	26	61.9	247	2	US-09-902-540-10230	Sequence 10230, A
839	26	61.9	147	1	US-08-579-940-4	Sequence 4, Appli	912	26	61.9	250	2	US-09-702-457-1677	Sequence 1677, Ap
840	26	61.9	147	1	US-08-842-234-2	Sequence 2, Appli	913	26	61.9	250	2	US-09-736-457-1677	Sequence 1677, Ap
841	26	61.9	147	2	US-08-838-692-6	Sequence 6, Appli	914	26	61.9	250	2	US-09-671-325-1677	Sequence 1677, Ap
842	26	61.9	147	2	US-09-671-317-488	Sequence 488, App	915	26	61.9	250	2	US-09-671-325-1677	Sequence 1677, Ap
843	26	61.9	148	2	US-09-252-991A-21307	Sequence 21307, A	916	26	61.9	250	2	US-09-671-325-1677	Sequence 1677, Ap
844	26	61.9	150	2	US-09-949-016-10256	Sequence 10256, A	917	26	61.9	250	2	US-09-671-325-1677	Sequence 1677, Ap
845	26	61.9	154	2	US-09-107-532A-5062	Sequence 5062, Ap	918	26	61.9	250	2	US-09-824-1677	Sequence 1677, Ap
846	26	61.9	154	2	US-09-489-039A-13313	Sequence 13313, A	919	26	61.9	250	2	US-10-017-754-1677	Sequence 1874, Ap
847	26	61.9	156	2	US-09-270-767-44615	Sequence 44615, A	920	26	61.9	250	2	US-10-017-754-1677	Sequence 2004, Ap
848	26	61.9	158	2	US-09-107-433-2807	Sequence 2807, Ap	921	26	61.9	257	2	US-09-651-563-1677	Sequence 1677, Ap
849	26	61.9	161	2	US-09-949-016-11168	Sequence 11168, Ap	922	26	61.9	257	2	US-09-312-283C-381	Sequence 381, App
850	26	61.9	162	1	US-08-319-704-6	Sequence 31926, A	923	26	61.9	257	2	US-09-489-039A-10053	Sequence 10053, A
851	26	61.9	163	2	US-09-270-767-32926	Sequence 32926, A	924	26	61.9	261	2	US-08-815-225-2	Sequence 2, Appli
852	26	61.9	163	2	US-09-270-767-48143	Sequence 48143, A	925	26	61.9	261	2	US-08-815-225-2	Sequence 2, Appli
853	26	61.9	164	2	US-10-101-464A-594	Sequence 594, App	926	26	61.9	261	2	US-09-347-878-50	Sequence 50, Appli
854	26	61.9	164	2	US-10-101-464A-596	Sequence 596, App	927	26	61.9	261	2	US-09-638-695-2	Sequence 2, Appli
855	26	61.9	165	2	US-10-101-464A-539	Sequence 539, App	928	26	61.9	263	2	US-08-972-008-2	Sequence 2, Appli
856	26	61.9	167	2	US-09-062-440-8	Sequence 8, Appli	929	26	61.9	263	2	US-09-141-927-2	Sequence 2, Appli
857	26	61.9	167	2	US-09-062-440-9	Sequence 9, Appli	930	26	61.9	263	2	US-09-411-877-2	Sequence 2, Appli
858	26	61.9	167	2	US-09-062-440-11	Sequence 11, Appli	931	26	61.9	263	2	US-09-267-409-2	Sequence 2, Appli
859	26	61.9	167	2	US-09-712-495-8	Sequence 8, Appli	932	26	61.9	263	2	US-09-617-804-2	Sequence 2, Appli
860	26	61.9	167	2	US-09-712-495-11	Sequence 11, Appli	933	26	61.9	263	2	US-09-949-016-6662	Sequence 6662, Ap
861	26	61.9	167	2	US-09-712-495-9	Sequence 9, Appli	934	26	61.9	263	2	US-10-057-951-2	Sequence 2, Appli
862	26	61.9	168	2	US-09-188-579-85	Sequence 85, Appli	935	26	61.9	263	2	US-10-101-392-2	Sequence 2, Appli
863	26	61.9	168	2	US-09-315-444-85	Sequence 85, Appli	936	26	61.9	263	2	US-09-372-874-2	Sequence 2, Appli
864	26	61.9	168	2	US-09-721-362-85	Sequence 85, Appli	937	26	61.9	263	2	US-09-949-016-7262	Sequence 7262, Ap
865	26	61.9	168	2	US-09-752-165-99	Sequence 99, Appli	938	26	61.9	263	2	US-09-328-352-1183	Sequence 1183, Ap
866	26	61.9	168	2	US-10-167-831-99	Sequence 99, Appli	939	26	61.9	270	2	US-09-252-991A-16844	Sequence 16844, A
867	26	61.9	169	2	US-10-104-047-3549	Sequence 3549, Ap	940	26	61.9	270	2	US-10-138-701-42	Sequence 142, Appli
868	26	61.9	172	2	US-09-270-767-36922	Sequence 36922, A	941	26	61.9	271	2	US-09-602-787A-194	Sequence 194, App
869	26	61.9	172	2	US-09-270-767-52139	Sequence 52139, A	942	26	61.9	271	2	US-09-605-703B-206	Sequence 206, App
870	26	61.9	174	2	US-09-270-767-33070	Sequence 33070, A	943	26	61.9	275	2	US-09-134-000C-4132	Sequence 4132, Ap
871	26	61.9	174	2	US-09-270-767-48287	Sequence 48287, A	944	26	61.9	282	2	US-09-724-623-113	Sequence 113, App
872	26	61.9	178	2	US-09-583-110-2756	Sequence 2756, Ap	945	26	61.9	283	2	US-09-492-709A-310	Sequence 310, App
873	26	61.9	180	2	US-09-949-016-10723	Sequence 10723, A	946	26	61.9	286	2	US-10-017-754-1878	Sequence 1878, Ap
874	26	61.9	183	2	US-09-071-035-126	Sequence 126, App	947	26	61.9	287	2	US-09-134-001C-5055	Sequence 5055, Ap
875	26	61.9	183	2	US-10-206-576-126	Sequence 126, App	948	26	61.9	289	2	US-08-311-731A-275	Sequence 275, App
876	26	61.9	184	2	US-09-248-796A-20343	Sequence 20343, A	949	26	61.9	293	2	US-09-035-758-9	Sequence 9, Appli
877	26	61.9	185	2	US-09-270-767-39023	Sequence 39023, A	950	26	61.9	293	2	US-09-422-968-9	Sequence 9, Appli
878	26	61.9	185	2	US-09-270-767-52420	Sequence 52420, A	951	26	61.9	293	2	US-09-708-015A-9	Sequence 9, Appli
879	26	61.9	187	2	US-09-270-767-41857	Sequence 41857, A	952	26	61.9	293	2	US-09-101-307D-54	Sequence 54, Appli
880	26	61.9	198	2	US-09-248-796A-20891	Sequence 20891, A	953	26	61.9	293	2	US-09-605-703B-54	Sequence 54, App
881	26	61.9	201	2	US-09-303-518D-540	Sequence 540, App	954	26	61.9	300	2	US-09-303-518D-544	Sequence 544, App
882	26	61.9	204	2	US-09-134-000C-3944	Sequence 3944, Ap	955	26	61.9	300	2	US-09-303-518D-548	Sequence 548, App
883	26	61.9	205	2	US-09-710-279-202	Sequence 202, App	956	26	61.9	301	2	PCT-US95-13975-72	Sequence 72, Appli
884	26	61.9	212	2	US-09-599-360B-94	Sequence 94, Appli	957	26	61.9	304	4	US-09-489-039A-8264	Sequence 8264, Ap
885	26	61.9	214	2	US-09-902-540-12328	Sequence 12328, A	958	26	61.9	304	2	US-09-489-039A-8264	Sequence 8264, Ap
886	26	61.9	215	2	US-09-902-540-13236	Sequence 13236, A	959	26	61.9	306	2	US-09-089-962-5	Sequence 5, Appli
887	26	61.9	218	2	US-09-543-681A-8142	Sequence 8142, Ap	960	26	61.9	306	2	US-10-671-628-8	Sequence 35, Appli
888	26	61.9	218	2	US-09-902-540-14056	Sequence 14056, A	961	26	61.9	306	2	US-09-549-848B-35	Sequence 35, Appli
889	26	61.9	219	2	US-09-270-767-57647	Sequence 57647, A	962	26	61.9	307	2	US-09-688-069-35	Sequence 153, App
890	26	61.9	224	2	US-09-270-767-36595	Sequence 36595, A	963	26	61.9	310	2	US-09-907-754A-153	Sequence 153, App
891	26	61.9	224	2	US-09-270-767-51812	Sequence 51812, A	964	26	61.9	310	2	US-09-905-125A-153	Sequence 153, App
892	26	61.9	225	2	US-09-270-767-60537	Sequence 60537, A	965	26	61.9	310	2	US-09-902-775A-153	Sequence 153, App
893	26	61.9	228	2	US-09-270-767-32302	Sequence 32302, A	966	26	61.9	310	2	US-09-906-700A-153	Sequence 153, App
894	26	61.9	228	2	US-09-270-767-47519	Sequence 47519, A	967	26	61.9	310	2	US-09-903-603A-153	Sequence 153, App
895	26	61.9	229	2	US-09-248-796A-27982	Sequence 27982, A	968	26	61.9	310	2	US-09-904-920A-153	Sequence 153, App
896	26	61.9	231	2	US-09-543-681A-5953	Sequence 5953, Ap	969	26	61.9	310	2	US-09-909-064-153	Sequence 153, App
897	26	61.9	232	2	US-09-252-991A-24479	Sequence 24479, A	970	26	61.9	310	2	US-09-905-391A-153	Sequence 153, App
898	26	61.9	233	2	US-08-444-644-33	Sequence 33, Appli	971	26	61.9	310	2	US-09-906-618-153	Sequence 153, App
899	26	61.9	233	2	US-08-444-644-19	Sequence 19, Appli	972	26	61.9	310	2	US-09-906-646-153	Sequence 153, App
900	26	61.9	235	2	US-08-444-644-28	Sequence 28, Appli	973	26	61.9	310	2	US-09-904-462-153	Sequence 153, App
901	26	61.9	235	2	US-08-444-644-42	Sequence 42, Appli	974	26	61.9	310	2	US-09-902-766A-153	Sequence 153, App
902	26	61.9	235	2	US-08-232-246A-19	Sequence 19, Appli	975	26	61.9	310	2	US-09-906-722A-153	Sequence 153, App
903	26	61.9	235	2			976	26	61.9	310	2		

577 26 61.9 311 2 US-09-902-540-15836 Sequence 15836, A
978 26 61.9 314 2 US-10-671-628-6 Sequence 6, Appl1
979 26 61.9 315 2 US-09-902-540-11852 Sequence 11852, A
980 26 61.9 316 2 US-09-252-91A-17312 Sequence 17312, A
981 26 61.9 316 2 US-10-009-962-6 Sequence 6, Appl1
982 26 61.9 317 2 US-09-383-586-20 Sequence 20, Appl1
983 26 61.9 317 2 US-09-823-038A-20 Sequence 20, Appl1
984 26 61.9 318 2 US-09-252-91A-32374 Sequence 32374, A
985 26 61.9 319 2 US-09-605-703B-56 Sequence 56, Appl1
986 26 61.9 321 2 US-09-540-236-2876 Sequence 2876, Ap
987 26 61.9 323 2 US-09-328-352-6181 Sequence 6181, Ap
988 26 61.9 324 2 US-09-252-91A-31493 Sequence 31493, A
989 26 61.9 325 2 US-09-489-039A-8024 Sequence 8024, Ap
990 26 61.9 325 2 US-09-311-021-74 Sequence 74, Appl1
991 26 61.9 325 2 US-09-806-536A-10 Sequence 10, Appl1
992 26 61.9 327 2 US-09-949-016-11578 Sequence 11578, A
993 26 61.9 333 1 US-08-997-362-36 Sequence 36, Appl1
994 26 61.9 333 1 US-08-997-362-36 Sequence 36, Appl1
995 26 61.9 333 2 US-08-873-970-36 Sequence 36, Appl1
996 26 61.9 333 2 US-09-095-855-36 Sequence 36, Appl1
997 26 61.9 333 2 US-08-705-347A-36 Sequence 36, Appl1
998 26 61.9 333 2 US-09-324-542-36 Sequence 36, Appl1
999 26 61.9 333 2 US-09-205-426-36 Sequence 36, Appl1
1000 26 61.9 333 2 US-09-200-643-36 Sequence 36, Appl1

ALIGNMENTS

RESULT 1
US-08-787-547-106
Sequence 106, Application US/08787547
Patent No. 5783567
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Curley, Joanne M.
APPLICANT: Langer, Robert S.
TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY
TITLE OF INVENTION: OF NUCLEIC ACID
NUMBER OF SEQUENCES: 107
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/787,547
FILING DATE: 22-JAN-1997
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janie K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 106:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-787-547-106

Query Match 100.0%; Score 42; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
|||||
Db 1 LLMGTIGIV 9

RESULT 2
US-08-948-378A-1
Sequence 1, Application US/08948378A
Patent No. 6013258

GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
TITLE OF INVENTION: THE HPV E7 PROTEIN
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/948,378A
FILING DATE: 09-OCT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janie K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-948-378A-1

Query Match 100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
|||||
Db 1 LLMGTIGIV 9

RESULT 3
US-09-124-671-9
Sequence 9, Application US/09124671A
Patent No. 6160088

GENERAL INFORMATION:
APPLICANT: Rothman, James
APPLICANT: Mayhew, Mark

APPLICANT: Hoe, Mee
TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
FILE REFERENCE: 31488
CURRENT APPLICATION NUMBER: US/09/124,671A
CURRENT FILING DATE: 1998-07-29
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 9
LENGTH: 9
TYPE: PRT
ORGANISM: papillomavirus
US-09-124-671-9

Query Match 100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
Db 1 LLMGTGIV 9

RESULT 4
US-09-169-425C-1
Sequence 1, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-1

Query Match 100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9

Db 1 LLMGTGIV 9

RESULT 5
US-08-197-484-65
Sequence 65, Application US/08197484
Patent No. 6419331
GENERAL INFORMATION:
APPLICANT: VITTELLO, Maria A.
APPLICANT: CHESTNUT, Robert W.
APPLICANT: SETTE, Alessandro D.
APPLICANT: CELIS, Bjarne
APPLICANT: GRAY, Howard
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Kourie and Crew
STREET: Steuart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 65:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-197-484-65

Query Match 100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
Db 1 LLMGTGIV 9

RESULT 6
US-09-759-960-1
Sequence 1, Application US/09759960

```
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; City: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-759-960-1

Query Match      100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTGLGIV 9
DB      1 LLMGTGLGIV 9

RESULT 7
US-09-601-729-271
; Sequence 271, Application US/09601729
; Patent No. 6683052
; GENERAL INFORMATION:
; APPLICANT: THIAM, KADER
; APPLICANT: AURIAULT, CLAUDE
; APPLICANT: GRAS-MASSE, HELENE
; APPLICANT: LOING, ESTELLE
; APPLICANT: VERMARDE, CLAUDIE
; APPLICANT: GUILLET, JEAN GERARD
; TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USES
; FILE REFERENCE: USB-97-AU-IN
; CURRENT APPLICATION NUMBER: US/09/601,729
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: PCT/FR99/00259
; PRIOR FILING DATE: 1999-02-05
; PRIOR APPLICATION NUMBER: 98 01439
; PRIOR FILING DATE: 1998-02-06
; NUMBER OF SEQ ID NOS: 281
```

```
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 271
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; US-09-601-729-271

Query Match      100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTGLGIV 9
DB      1 LLMGTGLGIV 9

RESULT 8
US-10-365-908-5
; Sequence 5, Application US/10365908
; Patent No. 6797491
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
; US-10-365-908-5

Query Match      100.0%; Score 42; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTGLGIV 9
DB      1 LLMGTGLGIV 9

RESULT 9
PCT-US95-02121-65
; Sequence 65, Application PC/TUS9502121
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; NUMBER OF SEQUENCES: 153
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/02121
; FILING DATE: 16-FEB-1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/197,484
```

RESULT 10
US-10-365-908-47
Sequence 47, Application US/10365908
Patent No. 6797491
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/365,908
PRIOR FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 47
LENGTH: 10
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-365-908-47

Query Match 100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LMGTGIV 9
Db 1 LMGTGIV 9

RESULT 10
US-10-365-908-47
Sequence 47, Application US/10365908
Patent No. 6797491
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Winnett, Mark T.
APPLICANT: Goldstone, Stephen E.
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/365,908
PRIOR FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 47
LENGTH: 10
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-365-908-47

Query Match 100.0%; Score 42; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.045;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LMGTGIV 9
Db 2 LMGTGIV 10

RESULT 11
US-08-948-378A-3
Sequence 3, Application US/08948378A
Patent No. 6013258
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chic, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
THE HPV E7 PROTEIN
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/948,378A
FILING DATE: 09-OCT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-948-378A-3

Query Match 100.0%; Score 42; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LMGTGIV 9
Db 1 LMGTGIV 9

RESULT 12
US-09-169-425C-3
Sequence 3, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chic, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US

ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-3

Query Match 100.0%; Score 42; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.06; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
Db 1 LLMGTIGIV 9

RESULT 13
US-09-759-960-3
Sequence 3, Application US/09759960
Patent No. 6582704
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070

TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-3

Query Match 100.0%; Score 42; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.06; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
Db 1 LLMGTIGIV 9

RESULT 14
US-09-169-425C-25
Sequence 25, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-25

Query Match 100.0%; Score 42; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.076; Mismatches 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
Db 1 LLMGTIGIV 9

RESULT 15
US-09-759-960-25
; Sequence 25, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Frazer, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-759-960-25
Query Match 100.0%; Score 42; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.076;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 LMGTLGIV 9
Db 1 LMGTLGIV 9
RESULT 16
US-09-980-523A-18
; Sequence 18, Application US/09980523A
; Patent No. 6783763
; GENERAL INFORMATION:
; APPLICANT: CHOPPIN, JEANINE
; APPLICANT: BOURGAULT VILLADA, ISABELLE
; APPLICANT: GUILLET, JEAN-GERARD
; APPLICANT: CONNAN, FRANCINE
; APPLICANT: FERRIES, ESTELLE
; TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE B6 AND E7
; TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
; TITLE OF INVENTION: PARTICULARLY IN VACCINATION
; FILE REFERENCE: WO/01/001,001
; CURRENT APPLICATION NUMBER: US/09/980,523A
; CURRENT FILING DATE: 2002-04-29
; PRIOR APPLICATION NUMBER: PCT/FR00/01513

; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: FR 99/07012
; PRIOR FILING DATE: 1999-06-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 18
; LENGTH: 19
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-09-980-523A-18
Query Match 100.0%; Score 42; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.091;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 LMGTLGIV 9
Db 4 LMGTLGIV 12
RESULT 17
US-08-075-541D-50
; Sequence 50, Application US/08075541D
; Patent No. 6183745
; GENERAL INFORMATION:
; APPLICANT: TINDLE, ROBERT
; APPLICANT: FERNANDO, GERMAIN
; APPLICANT: FRAZER, IAN
; TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
; TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: 1601 MARKET STREET, 36TH FLOOR
; CITY: PHILADELPHIA
; STATE: PENNSYLVANIA
; COUNTRY: USA
; ZIP: 19103-2398
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/075,541D
; FILING DATE: 10-JUN-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: AU pk 3876
; FILING DATE: 12-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: pce/au91/00575
; FILING DATE: 12-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: NADEL, ALAN S
; REGISTRATION NUMBER: 27,363
; REFERENCE/DOCKET NUMBER: 8795-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-567-2020
; TELEFAX: 215-567-2991
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-075-541D-50
Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | |
Db 12 LLMGTLGIV 20

RESULT 20

US-09-794-517A-12
; Sequence 12, Application US/09794517A

; Patent No. 6656679

; GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MATHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/794.517A

FILING DATE: 19-Oct-2001

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/002.479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002.490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

APPLICATION NUMBER: 09/011.645

FILING DATE: February 13, 1998

ATTORNEY/AGENT INFORMATION:

NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/13

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:

LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:

ORGANISM: <Unknown>

FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 12:

Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | |
Db 1 LLMGTLGIV 9

RESULT 21

US-09-794-517A-13
; Sequence 13, Application US/09794517A

; Patent No. 6656679

; GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MATHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/794.517A

FILING DATE: 19-Oct-2001

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/002.479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002.490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

APPLICATION NUMBER: 09/011.645

FILING DATE: February 13, 1998

ATTORNEY/AGENT INFORMATION:

NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/13

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:

ORGANISM: <Unknown>

FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 13:

Query Match 100.0%; Score 42; DB 2; Length 20;

US-09-794-517A-13

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
12 LLMGTGIV 20

RESULT 22

US-09-011-645E-12
Sequence 12, Application US/09011645E

Patent No. 6663868

GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOUGHTON, Alan

TAKECHI, Yoshizumi

MAYHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/011,645E

FILING DATE: 13-Feb-1998

CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/002,479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002,490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

ATTORNEY/AGENT INFORMATION:
NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/1

TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:
LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:
ORGANISM: <Unknown>

FEATURE:
OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 12:

US-09-011-645E-12

Query Match 100.0%; Score 42; DB 2; Length 20;

Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
12 LLMGTGIV 20

RESULT 23

US-09-011-645E-13
Sequence 13, Application US/09011645E

Patent No. 6663868

GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MAYHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/011,645E

FILING DATE: 13-Feb-1998

CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/002,479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002,490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

ATTORNEY/AGENT INFORMATION:
NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/1

TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:
LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:
ORGANISM: <Unknown>

FEATURE:
OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 13:

US-09-011-645E-13

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
| | | | | | | |
Db 12 LLMGTLGIV 20

RESULT 24

US-09-794-832-12
; Sequence 12, Application US/09794832
; Patent No. 6673348

GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MAYHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/794,832

FILING DATE: 27-Feb-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/011,645

FILING DATE: 13-Feb-1998

APPLICATION NUMBER: 60/002,479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002,490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

ATTORNEY/AGENT INFORMATION:

NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/1

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:

LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:

ORGANISM: <Unknown>

FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 12:

US-09-794-832-12

Query Match 100.0%; Score 42; DB 2; Length 20;

Best Local Similarity 100.0%; Pred. No. 0.097;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
| | | | | | | |
Db 1 LLMGTLGIV 9

RESULT 25

US-09-794-832-13
; Sequence 13, Application US/09794832
; Patent No. 6673348

GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MAYHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/794,832

FILING DATE: 27-Feb-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/011,645

FILING DATE: 13-Feb-1998

APPLICATION NUMBER: 60/002,479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002,490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

ATTORNEY/AGENT INFORMATION:

NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/1

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:

ORGANISM: <Unknown>

FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 13:

US-09-794-832-13

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLMGTGIV 9
12 LLMGTGIV 20
DB

RESULT 26
US-09-680-806A-12
; Sequence 12, Application US/09680806A
; Patent No. 6719974
; GENERAL INFORMATION:
; APPLICANT: Sloan-Kettering Institute for Cancer Research
; ROTHMAN, James E.
; HARTL, F. Ulrich
; HOE, Mee H.
; HOUGHTON, Alan
; TAKECHI, Yoshizumi
; MAYHEW, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and
; Immunotherapies
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenyon & Kenyon
; STREET: One Broadway
; CITY: New York
; STATE: NY
; COUNTRY: US
; ZIP: 10004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS DOS
; SOFTWARE: Word Perfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/680,806A
; FILING DATE: 05-Oct-2000
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/002,479
; FILING DATE: August 18, 1995
; APPLICATION NUMBER: 60/002,490
; FILING DATE: August 18, 1995
; APPLICATION NUMBER: PCT/US96/13363
; FILING DATE: August 16, 1996
; APPLICATION NUMBER: 09/011,645
; FILING DATE: February 13, 1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Delucia, Richard L.
; REGISTRATION NUMBER: 28,839
; REFERENCE/DOCKET NUMBER: 11746/10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 425-7200
; TELEFAX: (212) 425-5288
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: amino acid
; STRANDEDNESS: <Unknown>
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: <Unknown>
; FEATURE:
; OTHER INFORMATION: hybrid peptide for human papilloma
; virus vaccine
; SEQUENCE DESCRIPTION: SEQ ID NO: 12:
; US-09-680-806A-12

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLMGTGIV 9
1 LLMGTGIV 9
DB

RESULT 27
US-09-680-806A-13
; Sequence 13, Application US/09680806A
; Patent No. 6719974
; GENERAL INFORMATION:
; APPLICANT: Sloan-Kettering Institute for Cancer Research
; ROTHMAN, James E.
; HARTL, F. Ulrich
; HOE, Mee H.
; HOUGHTON, Alan
; TAKECHI, Yoshizumi
; MAYHEW, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and
; Immunotherapies
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenyon & Kenyon
; STREET: One Broadway
; CITY: New York
; STATE: NY
; COUNTRY: US
; ZIP: 10004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS DOS
; SOFTWARE: Word Perfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/680,806A
; FILING DATE: 05-Oct-2000
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/002,479
; FILING DATE: August 18, 1995
; APPLICATION NUMBER: 60/002,490
; FILING DATE: August 18, 1995
; APPLICATION NUMBER: PCT/US96/13363
; FILING DATE: August 16, 1996
; APPLICATION NUMBER: 09/011,645
; FILING DATE: February 13, 1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Delucia, Richard L.
; REGISTRATION NUMBER: 28,839
; REFERENCE/DOCKET NUMBER: 11746/10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 425-7200
; TELEFAX: (212) 425-5288
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: amino acid
; STRANDEDNESS: <Unknown>
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: <Unknown>
; FEATURE:
; OTHER INFORMATION: hybrid peptide for human papilloma
; virus vaccine
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
; US-09-680-806A-12

US-09-680-806A-13

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
12 LLMGTLGIV 20

RESULT 28

US-09-552-868-12
Sequence 12, Application US/09552868
Patent No. 6761892

GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MAYHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and
Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.5 inch, 1.44 MB storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/552,868

FILING DATE: 20-Apr-2000

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/002,479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002,490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

APPLICATION NUMBER: 09/011,645

FILING DATE: February 13, 1998

ATTORNEY/AGENT INFORMATION:

NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/8

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:

LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:

ORGANISM: <Unknown>

FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

value vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-552-868-12

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
1 LLMGTLGIV 9

RESULT 29

US-09-552-868-13
Sequence 13, Application US/09552868
Patent No. 6761892

GENERAL INFORMATION:

APPLICANT: Sloan-Kettering Institute for Cancer Research

ROTHMAN, James E.

HARTL, F. Ulrich

HOE, Mee H.

HOUGHTON, Alan

TAKECHI, Yoshizumi

MAYHEW, Mark

TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and
Immunotherapies

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kenyon & Kenyon

STREET: One Broadway

CITY: New York

STATE: NY

COUNTRY: US

ZIP: 10004

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.5 inch, 1.44 MB storage

COMPUTER: IBM compatible

OPERATING SYSTEM: MS DOS

SOFTWARE: Word Perfect

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/552,868

FILING DATE: 20-Apr-2000

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/002,479

FILING DATE: August 18, 1995

APPLICATION NUMBER: 60/002,490

FILING DATE: August 18, 1995

APPLICATION NUMBER: PCT/US96/13363

FILING DATE: August 16, 1996

APPLICATION NUMBER: 09/011,645

FILING DATE: February 13, 1998

ATTORNEY/AGENT INFORMATION:

NAME: Delucia, Richard L.

REGISTRATION NUMBER: 28,839

REFERENCE/DOCKET NUMBER: 11746/8

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 425-7200

TELEFAX: (212) 425-5288

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 20

TYPE: amino acid

STRANDEDNESS: <Unknown>

TOPOLOGY: linear

MOLECULE TYPE: peptide

HYPOTHETICAL: yes

FRAGMENT TYPE: internal

ORIGINAL SOURCE:

ORGANISM: <Unknown>

FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma

virus vaccine

value vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-552-868-13
virus vaccine

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
|||||
Db 12 LLMGTIGIV 20

RESULT 30
US-09-636-295-12
Sequence 12, Application US/09636295
Patent No. 6773707
GENERAL INFORMATION:
APPLICANT: Sloan-Kettering Institute for Cancer Research
ROTHMAN, James E.
HARTL, F. Ulrich
HOE, Mee H.
HOUGHTON, Alan
TAKACHI, Yoshizumi
MAYHEW, Mark
TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Kenyon & Kenyon
STREET: One Broadway
CITY: New York
STATE: NY
COUNTRY: US
ZIP: 10004
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS DOS
SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/636,295
FILING DATE: 10-Aug-2000
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/002,479
FILING DATE: August 18, 1995
APPLICATION NUMBER: 60/002,490
FILING DATE: August 18, 1995
APPLICATION NUMBER: PCT/US96/13363
FILING DATE: August 16, 1996
APPLICATION NUMBER: 09/011,645
FILING DATE: February 13, 1998
ATTORNEY/AGENT INFORMATION:
NAME: Delucia, Richard L.
REGISTRATION NUMBER: 28,839
REFERENCE/DOCKET NUMBER: 11746/9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 425-7200
TELEFAX: (212) 425-5288
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 20
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: yes
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
ORGANISM: <Unknown>
FEATURE:

OTHER INFORMATION: hybrid peptide for human papilloma
virus vaccine

SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-636-295-12

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
|||||
Db 1 LLMGTIGIV 9

RESULT 31
US-09-636-295-13
Sequence 13, Application US/09636295
Patent No. 6773707
GENERAL INFORMATION:
APPLICANT: Sloan-Kettering Institute for Cancer Research
ROTHMAN, James E.
HARTL, F. Ulrich
HOE, Mee H.
HOUGHTON, Alan
TAKACHI, Yoshizumi
MAYHEW, Mark
TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Kenyon & Kenyon
STREET: One Broadway
CITY: New York
STATE: NY
COUNTRY: US
ZIP: 10004
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS DOS
SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/636,295
FILING DATE: 10-Aug-2000
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/002,479
FILING DATE: August 18, 1995
APPLICATION NUMBER: 60/002,490
FILING DATE: August 18, 1995
APPLICATION NUMBER: PCT/US96/13363
FILING DATE: August 16, 1996
APPLICATION NUMBER: 09/011,645
FILING DATE: February 13, 1998
ATTORNEY/AGENT INFORMATION:
NAME: Delucia, Richard L.
REGISTRATION NUMBER: 28,839
REFERENCE/DOCKET NUMBER: 11746/9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 425-7200
TELEFAX: (212) 425-5288
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 20
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: yes
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
ORGANISM: <Unknown>
FEATURE:

FEATURE:
OTHER INFORMATION: hybrid peptide for human papilloma
virus vaccine
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-636-295-13

Query Match 100.0%; Score 42; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.097;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | | | |
Db 12 LLMGTLGIV 20

RESULT 32
US-08-934-915-50
Sequence 50, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
TITLE OF INVENTION: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-50

Query Match 100.0%; Score 42; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | | | |
Db 5 LLMGTLGIV 13

RESULT 33

US-08-934-915-157
Sequence 157, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
TITLE OF INVENTION: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 157:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-157

Query Match 100.0%; Score 42; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | | | |
Db 5 LLMGTLGIV 13

RESULT 34
US-09-980-177A-76
Sequence 76, Application US/09980177A
Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Jochmus, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-Cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus LI-Protein and use thereof in diagnosis and
TITLE OF INVENTION: Therapy
FIVE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/09/980,177A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01

TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 54:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-54

Query Match 100.0%; Score 42; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 14 LLMGTLGIV 22

RESULT 38
US-09-486-394-4
Sequence 4, Application US/09486394
Patent No. 6478749
GENERAL INFORMATION:
APPLICANT: Hopfl, Reinhard
TITLE OF INVENTION: Diagnostic Kit for Skin Tests, and Method
FILE REFERENCE: 032929-001
CURRENT APPLICATION NUMBER: US/09/486,394
PRIOR FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/04773
PRIOR FILING DATE: 1998-07-30
PRIOR APPLICATION NUMBER: DE 197 37 409.3
PRIOR FILING DATE: 1997-08-27
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn version 3.1
SEQ ID NO 4
LENGTH: 30
TYPE: PRT
ORGANISM: Human papillomavirus type 16
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(30)
OTHER INFORMATION: E7 peptide.
US-09-486-394-4

Query Match 100.0%; Score 42; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 22 LLMGTLGIV 30

RESULT 39
US-09-390-027-6
Sequence 6, Application US/09390027
Patent No. 6235523
GENERAL INFORMATION:
APPLICANT: GAJEWCZYK, Diane M.
APPLICANT: PERSSON, Roy
APPLICANT: YAO, Fei-Long
APPLICANT: CAO, Shi-Xian
APPLICANT: KLEIN, Michel H.
APPLICANT: TARTAGLIA, James
APPLICANT: MOINGEON, Philippe
APPLICANT: ROVINSKI, Benjamin
TITLE OF INVENTION: TREATMENT OF CERVICAL CANCER
FILE REFERENCE: 1038-982 MIS:jb
CURRENT APPLICATION NUMBER: US/09/390,027
CURRENT FILING DATE: 1999-09-03

EARLIER APPLICATION NUMBER: 60/099,291
EARLIER FILING DATE: 1998-09-04
NUMBER OF SEQ ID NOS: 12
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 59
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-390-027-6

Query Match 100.0%; Score 42; DB 2; Length 59;
Best Local Similarity 100.0%; Pred. No. 0.32;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 27 LLMGTLGIV 35

RESULT 40
US-08-406-248-6
Sequence 6, Application US/08406248
Patent No. 5736318
GENERAL INFORMATION:
APPLICANT: Munger, Karl
APPLICANT: Jones, D. Leanne
TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
TITLE OF INVENTION: TRANSFORMED CELLS
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kusner
STREET: 200 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/406,248
FILING DATE:
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Mcdaniels, Patricia A.
REGISTRATION NUMBER: 33,194
REFERENCE/DOCKET NUMBER: HAZ-011
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-406-248-6

Query Match 100.0%; Score 42; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 82 LLMGTLGIV 90

RESULT 41
US-08-075-541D-42

```
/ Sequence 42, Application US/0807541D
/ Patent No. 6183745
/ GENERAL INFORMATION:
/ APPLICANT: TINDLE, ROBERT
/ APPLICANT: FERNANDO, GERMAIN
/ APPLICANT: FRAZER, IAN
/ TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
/ TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
/ NUMBER OF SEQUENCES: 56
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P. C.
/ STREET: 1601 MARKET STREET, 36TH FLOOR
/ CITY: PHILADELPHIA
/ STATE: PENNSYLVANIA
/ COUNTRY: USA
/ ZIP: 19103-2398
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/075,541D
/ FILING DATE: 10-JUN-1993
/ CLASSIFICATION: 424
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: AU pk 3876
/ FILING DATE: 12-DEC-1990
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: pct/au91/00575
/ FILING DATE: 12-DEC-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: NADEL, ALAN S
/ REGISTRATION NUMBER: 27,363
/ REFERENCE/DOCKET NUMBER: 8795-4
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 215-567-2020
/ TELEFAX: 215-567-2991
/ INFORMATION FOR SEQ ID NO: 42:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 98 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ US-08-075-541D-42

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

QY      1 LLMGTLGIIV 9
      |||||
      82 LLMGTLGIIV 90

Db

RESULT 42
US-09-382-616A-1
/ Sequence 1, Application US/09382616A
/ Patent No. 6200746
/ GENERAL INFORMATION:
/ APPLICANT: Fisher, Christopher
/ APPLICANT: He, Wankia
/ TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
/ FILE REFERENCE: 28341/6216
/ CURRENT APPLICATION NUMBER: US/09/382,616A
/ PRIOR FILING DATE: 1999-08-25
/ PRIOR APPLICATION NUMBER: 09/382,616
/ NUMBER OF SEQ ID NOS: 43
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 1
/ LENGTH: 98
```

```
/ TYPE: PRT
/ ORGANISM: Papillomavirus sylvilagi
/ US-09-382-616A-1

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTLGIIV 9
      |||||
      82 LLMGTLGIIV 90

Db

RESULT 43
US-08-944-368A-4
/ Sequence 4, Application US/08944368A
/ Patent No. 6228368
/ GENERAL INFORMATION:
/ APPLICANT: Giesman, et al.
/ TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine
/ TITLE OF INVENTION: Formulations and Methods of Use
/ NUMBER OF SEQUENCES: 28
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
/ ADDRESSER: Borun
/ STREET: 233 South Wacker Drive, 6300 Sears Tower
/ CITY: Chicago
/ STATE: Illinois
/ COUNTRY: United States of America
/ ZIP: 60606-6402
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/944,368A
/ FILING DATE:
/ CLASSIFICATION: 424
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Williams Jr., Joseph A.
/ REGISTRATION NUMBER: 38,659
/ REFERENCE/DOCKET NUMBER: 27013/34028
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 312-474-6300
/ TELEFAX: 312-474-0448
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 98 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-944-368A-4

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0;

QY      1 LLMGTLGIIV 9
      |||||
      82 LLMGTLGIIV 90

Db

RESULT 44
US-09-820-764-4
/ Sequence 4, Application US/09820764
/ Patent No. 6352696
/ GENERAL INFORMATION:
/ APPLICANT: BURGER, Alexander
/ APPLICANT: HALLER, Michael
/ TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
/ FORMULATIONS AND METHODS OF USE
/ NUMBER OF SEQUENCES: 28
```


CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,764
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: SandercocK, Colin G.
REGISTRATION NUMBER: 31,298
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
LENGTH: 98 amino acids
SEQUENCE CHARACTERISTICS:
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-820-764-4

Query Match 100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
DB 82 LLMGTIGIV 90

RESULT 45
US-09-613-303-8
Sequence 8, Application US/09613303
Patent No. 6495347
GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A THI-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/09/613,303
CURRENT FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match 100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56; 0; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLMGTIGIV 9

DB 82 LLMGTIGIV 90
RESULT 46
US-09-566-420-19
Sequence 19, Application US/09566420
Patent No. 650641
GENERAL INFORMATION:
APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
TITLE OF INVENTION: IMMUNE RESPONSE
FILE REFERENCE: TBA
CURRENT APPLICATION NUMBER: US/09/566,420
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/132,752
PRIOR FILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 60/132,750
PRIOR FILING DATE: 1999-05-06
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 19
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type E7
US-09-566-420-19

Query Match 100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
DB 82 LLMGTIGIV 90

RESULT 47
US-09-986-118A-4
Sequence 4, Application US/09986118A
Patent No. 6562351
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESSES:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. 6562351-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: SandercocK, Colin G.
REGISTRATION NUMBER: 31,298
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:

```

;
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 98 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
;   MOLECULE TYPE: protein
;   SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
    |||||
    82 LLMGTIGIV 90

Db

RESULT 48
US-09-728-466-1
; Sequence 1, Application US/09728466
; Patent No. 6641994
; GENERAL INFORMATION:
; APPLICANT: Fisher, Christopher
; TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
; FILE REFERENCE: 28341/6216
; CURRENT APPLICATION NUMBER: US/09/728,466
; PRIOR FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: 09/382,616
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 1
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
    |||||
    82 LLMGTIGIV 90

Db

RESULT 49
US-09-824-017-4
; Sequence 4, Application US/09824017
; Patent No. 6649167
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
; FORMULATIONS AND METHODS OF USE
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/824,017
; FILING DATE: 03-Apr-2001
; CLASSIFICATION: 424
```

```

;
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: 09/026,896
;   FILING DATE: 1998-02-20
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Sandercock, Colin G.
;     REGISTRATION NUMBER: 31,298
;     REFERENCE/DOCKET NUMBER: 37067/102
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (202) 672-5300
;     TELEFAX: (202) 672-5399
;   INFORMATION FOR SEQ ID NO: 4:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH: 98 amino acids
;       TYPE: amino acid
;       TOPOLOGY: linear
;       MOLECULE TYPE: protein
;       SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
    |||||
    82 LLMGTIGIV 90

Db

RESULT 50
US-10-267-311-8
; Sequence 8, Application US/10267311
; Patent No. 6657055
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/10/267,311
; PRIOR FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: US/09/613,303
; PRIOR FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-10-267-311-8

Query Match          100.0%; Score 42; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.56;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
    |||||
    82 LLMGTIGIV 90

Db

Search completed: May 5, 2006, 01:37:41
Job time : 25.2 secs
```

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 07:10:32 ; Search time 68.2 Seconds
(without alignments)
55.139 Million cell updates/sec

Title: US-08-170-344-18

Sequence: 1 LMGTLGIV 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	100.0	9	3	US-09-759-960-1
2	42	100.0	9	3	US-09-891-823-5
3	42	100.0	9	3	US-09-909-460-106
4	42	100.0	9	3	US-09-872-836-111
5	42	100.0	9	3	US-09-872-836-111
6	42	100.0	9	4	US-10-128-721-65
7	42	100.0	9	4	US-10-133-210-275
8	42	100.0	9	4	US-10-052-578-314
9	42	100.0	9	4	US-10-053-520-314
10	42	100.0	9	4	US-10-365-908-5
11	42	100.0	9	4	US-10-053-498B-314
12	42	100.0	9	4	US-10-367-580-88
13	42	100.0	9	4	US-10-367-593-88
14	42	100.0	9	4	US-10-367-594-88
15	42	100.0	9	4	US-10-367-654-88
16	42	100.0	9	4	US-10-367-658-88
17	42	100.0	9	4	US-10-367-668-88
18	42	100.0	9	4	US-10-472-661-4
19	42	100.0	9	4	US-10-367-674-88
20	42	100.0	9	4	US-10-777-053-543
21	42	100.0	9	4	US-10-837-217-543
22	42	100.0	9	4	US-10-815-514-9
23	42	100.0	9	5	US-10-603-062-1
24	42	100.0	9	5	US-10-877-930-9
25	42	100.0	9	5	US-10-871-138-5
26	42	100.0	9	5	US-10-758-970-106
27	42	100.0	9	5	US-10-484-063-17

28	42	100.0	9	5	US-10-873-594-9	Sequence 9, Appli
29	42	100.0	9	5	US-10-751-845-60	Sequence 60, Appl
30	42	100.0	9	5	US-10-924-377-16	Sequence 16, Appl
31	42	100.0	9	5	US-10-776-521B-67	Sequence 67, Appl
32	42	100.0	9	5	US-10-820-067A-67	Sequence 67, Appl
33	42	100.0	10	3	US-09-891-823-47	Sequence 47, Appl
34	42	100.0	10	4	US-10-062-710-229	Sequence 229, App
35	42	100.0	10	4	US-10-365-008-47	Sequence 47, Appl
36	42	100.0	10	5	US-10-871-138-47	Sequence 47, Appl
37	42	100.0	10	5	US-10-751-845-107	Sequence 107, App
38	42	100.0	11	4	US-10-472-661-7	Sequence 7, Appli
39	42	100.0	12	3	US-09-909-460-110	Sequence 108, App
40	42	100.0	12	3	US-09-872-836-110	Sequence 108, App
41	42	100.0	12	5	US-10-758-970-108	Sequence 108, App
42	42	100.0	13	3	US-09-759-960-3	Sequence 62, Appl
43	42	100.0	13	3	US-09-872-836-110	Sequence 3, Appli
44	42	100.0	13	3	US-09-872-836-110	Sequence 110, App
45	42	100.0	13	5	US-10-603-062-3	Sequence 3, Appli
46	42	100.0	13	5	US-10-648-547-75	Sequence 75, Appl
47	42	100.0	15	4	US-10-648-547-79	Sequence 79, Appl
48	42	100.0	15	4	US-10-648-547-84	Sequence 84, Appl
49	42	100.0	15	4	US-10-648-547-84	Sequence 84, Appl
50	42	100.0	15	4	US-10-476-570-51	Sequence 51, Appl
51	42	100.0	15	4	US-10-306-541-75	Sequence 75, Appl
52	42	100.0	15	4	US-10-306-541-79	Sequence 79, Appl
53	42	100.0	15	4	US-10-306-541-84	Sequence 84, Appl
54	42	100.0	15	4	US-10-306-541-84	Sequence 84, Appl
55	42	100.0	16	3	US-09-759-960-25	Sequence 25, Appl
56	42	100.0	16	3	US-09-909-460-109	Sequence 109, App
57	42	100.0	16	3	US-09-872-836-109	Sequence 109, App
58	42	100.0	16	3	US-10-603-062-25	Sequence 25, Appl
59	42	100.0	16	5	US-10-758-970-109	Sequence 109, App
60	42	100.0	17	5	US-10-751-845-59	Sequence 59, Appl
61	42	100.0	17	5	US-10-476-570-58	Sequence 58, Appl
62	42	100.0	19	4	US-10-858-384-18	Sequence 18, Appl
63	42	100.0	20	3	US-09-794-517-12	Sequence 12, Appl
64	42	100.0	20	3	US-09-794-517-13	Sequence 13, Appl
65	42	100.0	20	3	US-09-794-517-13	Sequence 13, Appl
66	42	100.0	20	3	US-09-794-517-13	Sequence 13, Appl
67	42	100.0	20	3	US-09-794-517-13	Sequence 13, Appl
68	42	100.0	20	3	US-09-794-832-12	Sequence 12, Appl
69	42	100.0	20	3	US-09-794-832-12	Sequence 12, Appl
70	42	100.0	20	4	US-10-170-713A-12	Sequence 12, Appl
71	42	100.0	20	4	US-10-170-713A-13	Sequence 13, Appl
72	42	100.0	20	4	US-10-171-734-12	Sequence 12, Appl
73	42	100.0	20	4	US-10-171-734-12	Sequence 12, Appl
74	42	100.0	20	4	US-10-367-580-12	Sequence 12, Appl
75	42	100.0	20	4	US-10-367-580-13	Sequence 13, Appl
76	42	100.0	20	4	US-10-367-583-13	Sequence 13, Appl
77	42	100.0	20	4	US-10-367-594-12	Sequence 12, Appl
78	42	100.0	20	4	US-10-367-594-13	Sequence 13, Appl
79	42	100.0	20	4	US-10-367-654-12	Sequence 12, Appl
80	42	100.0	20	4	US-10-367-654-12	Sequence 12, Appl
81	42	100.0	20	4	US-10-367-654-12	Sequence 12, Appl
82	42	100.0	20	4	US-10-367-658-13	Sequence 13, Appl
83	42	100.0	20	4	US-10-367-658-13	Sequence 13, Appl
84	42	100.0	20	4	US-10-367-668-12	Sequence 12, Appl
85	42	100.0	20	4	US-10-367-674-12	Sequence 12, Appl
86	42	100.0	20	4	US-10-367-674-12	Sequence 12, Appl
87	42	100.0	20	5	US-10-484-063-19	Sequence 19, Appl
88	42	100.0	20	5	US-10-484-063-19	Sequence 19, Appl
89	42	100.0	21	4	US-10-432-465-51	Sequence 51, Appl
90	42	100.0	21	4	US-10-476-570-18	Sequence 18, Appl
91	42	100.0	21	5	US-10-890-526-76	Sequence 76, Appl
92	42	100.0	21	5	US-09-728-466-1	Sequence 1, Appli
93	42	100.0	98	3	US-09-820-765-4	Sequence 4, Appli
94	42	100.0	98	3	US-09-824-017-4	Sequence 4, Appli
95	42	100.0	98	3	US-09-986-118A-4	Sequence 8, Appli
96	42	100.0	98	4	US-10-267-311-8	Sequence 31, App
97	42	100.0	98	4	US-10-177-390-8	Sequence 8, Appli
98	42	100.0	98	4	US-10-201-764-19	Sequence 19, Appl
99	42	100.0	98	4	US-10-392-113-29	Sequence 29, Appl
100	42	100.0	98	4	US-10-654-123-4	Sequence 4, Appli

101	42	100.0	98	4	US-10-681-410-19	Sequence 19, Appl	174	34	81.0	9	5	US-10-924-377-14	Sequence 14, Appl
102	42	100.0	98	4	US-10-772-988-3	Sequence 3, Appl1	175	34	81.0	9	5	US-10-924-377-18	Sequence 18, Appl
103	42	100.0	98	4	US-10-479-541-5	Sequence 5, Appl1	176	34	81.0	10	3	US-09-891-823-46	Sequence 46, Appl
104	42	100.0	98	5	US-10-042-526A-4	Sequence 4, Appl1	177	34	81.0	10	4	US-10-365-908-44	Sequence 46, Appl
105	42	100.0	98	5	US-10-657-399-1	Sequence 1, Appl1	178	34	81.0	10	5	US-10-871-138-46	Sequence 46, Appl
106	42	100.0	98	5	US-10-858-384-12	Sequence 12, Appl	179	34	81.0	11	3	US-09-759-960-33	Sequence 33, Appl
107	42	100.0	98	5	US-10-484-063-26	Sequence 26, Appl	180	34	81.0	11	5	US-10-603-062-33	Sequence 33, Appl
108	42	100.0	98	5	US-10-343-448-5	Sequence 5, Appl1	181	34	81.0	14	3	US-09-759-960-32	Sequence 32, Appl
109	42	100.0	98	5	US-10-679-956-8	Sequence 8, Appl1	182	34	81.0	15	3	US-10-603-062-32	Sequence 32, Appl
110	42	100.0	98	5	US-10-367-057-17	Sequence 17, Appl	183	34	81.0	15	4	US-10-648-547-71	Sequence 71, Appl
111	42	100.0	98	6	US-11-077-939-5	Sequence 5, Appl1	184	34	81.0	15	4	US-10-476-570-52	Sequence 52, Appl
112	42	100.0	99	4	US-10-475-440-7	Sequence 7, Appl1	185	34	81.0	15	4	US-10-306-541-71	Sequence 71, Appl
113	42	100.0	111	4	US-10-472-724-4	Sequence 4, Appl1	186	34	81.0	15	4	US-10-425-115-317757	Sequence 317757, A
114	42	100.0	117	5	US-10-751-845-126	Sequence 126, App	187	34	81.0	170	4	US-10-767-701-57681	Sequence 57681, A
115	42	100.0	121	4	US-10-267-311-12	Sequence 12, Appl	188	34	81.0	209	4	US-10-425-115-317755	Sequence 317755, A
116	42	100.0	121	5	US-10-679-956-12	Sequence 12, Appl	189	34	81.0	305	4	US-10-437-963-138113	Sequence 138113, A
117	42	100.0	185	6	US-11-072-288-2	Sequence 2, Appl1	190	34	81.0	425	4	US-10-282-122A-45351	Sequence 45351, A
118	42	100.0	198	4	US-10-267-311-35	Sequence 35, Appl	191	34	81.0	438	4	US-10-437-963-138115	Sequence 138115, A
119	42	100.0	198	5	US-10-679-956-35	Sequence 35, Appl	192	34	81.0	440	4	US-10-425-115-317754	Sequence 317754, A
120	42	100.0	220	4	US-10-000-903-1	Sequence 1, Appl1	193	34	81.0	463	4	US-10-425-115-317759	Sequence 317759, A
121	42	100.0	220	4	US-10-000-903-8	Sequence 8, Appl1	194	34	81.0	470	4	US-10-425-114-64116	Sequence 64116, A
122	42	100.0	220	5	US-10-899-771-1	Sequence 1, Appl1	195	34	81.0	1563	6	US-11-097-143-2088	Sequence 2088, Ap
123	42	100.0	220	5	US-10-899-771-8	Sequence 8, Appl1	196	33	78.6	9	3	US-09-891-823-54	Sequence 54, Appl
124	42	100.0	226	5	US-10-751-845-157	Sequence 157, App	197	33	78.6	9	4	US-10-052-578-313	Sequence 313, App
125	42	100.0	227	5	US-10-751-845-158	Sequence 158, App	198	33	78.6	9	4	US-10-053-520-313	Sequence 313, App
126	42	100.0	229	4	US-10-000-903-12	Sequence 12, Appl	199	33	78.6	9	4	US-10-365-908-54	Sequence 54, Appl
127	42	100.0	239	5	US-10-899-771-12	Sequence 12, Appl	200	33	78.6	9	4	US-10-053-498B-313	Sequence 313, App
128	42	100.0	261	5	US-10-751-845-160	Sequence 160, App	201	33	78.6	9	4	US-10-367-658-87	Sequence 87, Appl
129	42	100.0	266	3	US-09-367-309A-1	Sequence 1, Appl1	202	33	78.6	9	4	US-10-367-593-87	Sequence 87, Appl
130	42	100.0	289	4	US-10-115-440-5	Sequence 5, Appl1	203	33	78.6	9	4	US-10-367-654-87	Sequence 87, Appl
131	42	100.0	295	4	US-10-267-311-33	Sequence 33, Appl	204	33	78.6	9	4	US-10-367-658-87	Sequence 87, Appl
132	42	100.0	295	5	US-10-679-956-33	Sequence 33, Appl	205	33	78.6	9	4	US-10-367-658-87	Sequence 87, Appl
133	42	100.0	324	4	US-10-267-311-25	Sequence 25, Appl	206	33	78.6	9	4	US-10-367-668-87	Sequence 87, Appl
134	42	100.0	334	5	US-10-679-956-25	Sequence 25, Appl	207	33	78.6	9	4	US-10-367-674-87	Sequence 87, Appl
135	42	100.0	334	4	US-10-472-724-10	Sequence 10, Appl	208	33	78.6	9	4	US-10-815-514-8	Sequence 8, Appl1
136	42	100.0	371	4	US-10-000-903-6	Sequence 6, Appl1	209	33	78.6	9	5	US-10-877-930-8	Sequence 8, Appl1
137	42	100.0	371	5	US-10-899-771-6	Sequence 6, Appl1	210	33	78.6	9	5	US-10-871-138-54	Sequence 54, Appl
138	42	100.0	390	4	US-10-000-903-14	Sequence 14, Appl	211	33	78.6	9	5	US-10-873-594-8	Sequence 8, Appl1
139	42	100.0	390	5	US-10-899-771-14	Sequence 14, Appl	212	33	78.6	9	5	US-10-776-521B-66	Sequence 66, Appl
140	42	100.0	421	4	US-10-296-770-7	Sequence 7, Appl1	213	33	78.6	9	5	US-10-820-067A-66	Sequence 66, Appl
141	42	100.0	493	4	US-10-267-311-19	Sequence 19, Appl	214	33	78.6	20	3	US-09-794-517-11	Sequence 11, Appl
142	42	100.0	493	5	US-10-679-956-19	Sequence 19, Appl	215	33	78.6	20	3	US-09-794-517-11	Sequence 11, Appl
143	42	100.0	639	4	US-10-267-311-17	Sequence 17, Appl	216	33	78.6	20	3	US-09-794-529-10	Sequence 10, Appl
144	42	100.0	639	5	US-10-679-956-17	Sequence 17, Appl	217	33	78.6	20	3	US-09-794-529-11	Sequence 11, Appl
145	42	100.0	641	4	US-10-267-311-51	Sequence 51, Appl	218	33	78.6	20	3	US-09-794-832-10	Sequence 10, Appl
146	42	100.0	641	5	US-10-679-956-51	Sequence 51, Appl	219	33	78.6	20	3	US-09-794-832-11	Sequence 11, Appl
147	42	100.0	647	4	US-10-267-311-53	Sequence 53, Appl	220	33	78.6	20	4	US-10-170-713A-10	Sequence 10, Appl
148	42	100.0	647	5	US-10-679-956-53	Sequence 53, Appl	221	33	78.6	20	4	US-10-170-713A-11	Sequence 11, Appl
149	42	100.0	648	4	US-10-267-311-29	Sequence 29, Appl	222	33	78.6	20	4	US-10-171-734-10	Sequence 10, Appl
150	42	100.0	648	5	US-10-679-956-29	Sequence 29, Appl	223	33	78.6	20	4	US-10-171-734-11	Sequence 11, Appl
151	42	100.0	711	4	US-10-267-311-41	Sequence 41, Appl	224	33	78.6	20	4	US-10-367-580-10	Sequence 10, Appl
152	42	100.0	711	5	US-10-679-956-41	Sequence 41, Appl	225	33	78.6	20	4	US-10-367-580-11	Sequence 11, Appl
153	42	100.0	724	4	US-10-267-311-45	Sequence 45, Appl	226	33	78.6	20	4	US-10-367-593-10	Sequence 10, Appl
154	42	100.0	724	5	US-10-679-956-45	Sequence 45, Appl	227	33	78.6	20	4	US-10-367-593-11	Sequence 11, Appl
155	42	100.0	805	4	US-10-367-095-9	Sequence 9, Appl1	228	33	78.6	20	4	US-10-367-594-10	Sequence 10, Appl
156	42	100.0	805	4	US-10-368-046-9	Sequence 9, Appl1	229	33	78.6	20	4	US-10-367-594-11	Sequence 11, Appl
157	42	100.0	805	4	US-10-367-367-9	Sequence 9, Appl1	230	33	78.6	20	4	US-10-367-654-10	Sequence 10, Appl
158	42	100.0	805	5	US-10-918-337-9	Sequence 9, Appl1	231	33	78.6	20	4	US-10-367-654-11	Sequence 11, Appl
159	38	90.5	9	5	US-10-751-845-100	Sequence 100, App	232	33	78.6	20	4	US-10-367-658-10	Sequence 10, Appl
160	38	90.5	9	5	US-10-924-377-15	Sequence 15, Appl	233	33	78.6	20	4	US-10-367-658-11	Sequence 11, Appl
161	38	90.5	9	5	US-10-924-377-17	Sequence 17, Appl	234	33	78.6	20	4	US-10-367-658-10	Sequence 10, Appl
162	38	90.5	10	3	US-09-891-823-38	Sequence 38, Appl	235	33	78.6	20	4	US-10-367-668-11	Sequence 11, Appl
163	38	90.5	10	4	US-10-365-908-38	Sequence 38, Appl	236	33	78.6	20	4	US-10-367-674-10	Sequence 10, Appl
164	38	90.5	10	5	US-10-871-138-38	Sequence 38, Appl	237	33	78.6	20	4	US-10-367-674-11	Sequence 11, Appl
165	38	90.5	12	3	US-09-759-960-16	Sequence 16, Appl	238	33	78.6	154	5	US-10-450-763-54278	Sequence 54278, A
166	38	90.5	12	5	US-10-603-062-16	Sequence 16, Appl	239	33	78.6	179	3	US-09-819-039-130	Sequence 130, App
167	38	90.5	13	3	US-09-759-960-4	Sequence 4, Appl1	240	33	78.6	179	3	US-10-335-009-10	Sequence 10, Appl
168	38	90.5	13	3	US-09-759-960-19	Sequence 19, Appl	241	33	78.6	234	5	US-10-732-923-15654	Sequence 15654, A
169	38	90.5	13	5	US-10-603-062-4	Sequence 4, Appl1	242	33	78.6	388	3	US-09-882-227-102	Sequence 102, App
170	38	90.5	13	3	US-10-603-062-19	Sequence 19, Appl	243	33	78.6	517	5	US-10-475-203A-14	Sequence 14, Appl
171	38	90.5	38	3	US-09-759-960-6	Sequence 6, Appl1	244	33	78.6	44	4	US-10-425-115-223312	Sequence 223312, A
172	38	90.5	38	5	US-10-603-062-6	Sequence 6, Appl1	245	32	76.2	44	4	US-10-425-115-223312	Sequence 223312, A
173	37	88.1	715	4	US-10-369-493-18297	Sequence 18297, A	246	32	76.2	109	4	US-10-424-599-216563	Sequence 216563, A

247	32	76.2	109	5	US-10-774-355A-2382	Sequence 2382, Ap	320	31	73.8	464	6	US-11-120-777-6	Sequence 6, Appli
248	32	76.2	119	4	US-10-425-115-310897	Sequence 310897, A	321	31	73.8	473	4	US-10-282-1228-61289	Sequence 61289, A
249	32	76.2	150	4	US-10-437-963-198669	Sequence 198669, A	322	31	73.8	489	4	US-10-408-765A-2035	Sequence 2035, Ap
250	32	76.2	251	4	US-10-425-114-47530	Sequence 47530, A	323	31	73.8	506	4	US-10-156-761-9830	Sequence 9830, Ap
251	32	76.2	318	4	US-10-437-963-111655	Sequence 111655, A	324	31	73.8	513	5	US-10-758-846-55	Sequence 55, Appli
252	32	76.2	340	4	US-10-021-121-4	Sequence 4, Appli	325	31	73.8	513	5	US-10-966-905-348	Sequence 348, App
253	32	76.2	340	4	US-10-138-787-3	Sequence 3, Appli	326	31	73.8	514	4	US-10-425-115-201790	Sequence 201790, A
254	32	76.2	340	4	US-10-417-924A-2	Sequence 2, Appli	327	31	73.8	514	5	US-10-450-763-40540	Sequence 40540, A
255	32	76.2	340	5	US-10-723-860-1256	Sequence 4256, Ap	328	31	73.8	513	4	US-10-425-114-59171	Sequence 59171, A
256	32	76.2	340	5	US-10-698-907-16	Sequence 16, Appli	329	31	73.8	559	4	US-10-474-776-246	Sequence 246, App
257	32	76.2	455	4	US-10-021-121-5	Sequence 2, Appli	330	31	73.8	556	5	US-10-617-320-4206	Sequence 4206, Ap
258	32	76.2	457	4	US-10-369-493-22072	Sequence 22072, A	331	31	73.8	575	5	US-10-505-486-70	Sequence 70, Appli
259	32	76.2	482	4	US-10-282-122A-60386	Sequence 60386, A	332	31	73.8	581	4	US-10-282-122A-71827	Sequence 71827, A
260	32	76.2	567	4	US-10-369-493-2008	Sequence 2008, Ap	333	31	73.8	636	4	US-10-882-122A-50816	Sequence 50816, A
261	32	76.2	597	4	US-10-437-963-179215	Sequence 179215, A	334	31	73.8	636	4	US-10-282-122A-78426	Sequence 78426, A
262	32	76.2	701	3	US-09-738-626-6196	Sequence 6196, Ap	335	31	73.8	675	4	US-10-882-122A-70237	Sequence 70237, A
263	32	76.2	728	5	US-10-450-763-66363	Sequence 46363, A	336	31	73.8	675	4	US-10-282-122A-50229	Sequence 50229, A
264	32	76.2	1210	4	US-10-128-714-3078	Sequence 3078, Ap	337	31	73.8	742	4	US-10-282-122A-47652	Sequence 47652, A
265	32	76.2	1224	4	US-10-437-963-164169	Sequence 164169, A	338	31	73.8	742	4	US-10-369-493-18955	Sequence 18955, A
266	32	76.2	1246	4	US-10-128-714-8078	Sequence 8078, Ap	339	31	73.8	1233	4	US-10-424-599-174833	Sequence 174833, A
267	31	73.8	18	3	US-09-742-732-4	Sequence 4, Appli	340	31	73.8	1288	4	US-10-424-599-174834	Sequence 174834, A
268	31	73.8	18	5	US-10-921-613-4	Sequence 4, Appli	341	31	73.8	1915	4	US-10-408-765A-2936	Sequence 2936, Ap
269	31	73.8	30	4	US-10-424-599-148082	Sequence 148082, A	342	30	71.4	87	4	US-10-424-599-246253	Sequence 246253, A
270	31	73.8	66	4	US-10-424-599-266271	Sequence 266271, A	343	30	71.4	87	4	US-10-424-599-246253	Sequence 246253, A
271	31	73.8	68	4	US-10-437-963-167313	Sequence 167313, A	344	30	71.4	92	4	US-10-767-701-38274	Sequence 38274, A
272	31	73.8	72	4	US-10-425-115-257957	Sequence 257957, A	345	30	71.4	66	4	US-10-424-599-203167	Sequence 203167, A
273	31	73.8	101	4	US-10-335-977-6180	Sequence 6180, Ap	346	30	71.4	64	4	US-10-424-599-203167	Sequence 203167, A
274	31	73.8	102	4	US-10-335-977-6179	Sequence 6179, Ap	347	30	71.4	64	4	US-10-425-115-262917	Sequence 262917, A
275	31	73.8	110	4	US-10-767-701-88512	Sequence 88512, A	348	30	71.4	64	4	US-10-425-115-267858	Sequence 267858, A
276	31	73.8	112	4	US-10-767-701-88585	Sequence 38585, A	349	30	71.4	70	4	US-10-106-698-6851	Sequence 6851, Ap
277	31	73.8	138	4	US-10-282-122A-44888	Sequence 44888, A	350	30	71.4	87	4	US-10-424-599-246253	Sequence 246253, A
278	31	73.8	158	4	US-10-425-115-265202	Sequence 265202, A	351	30	71.4	105	4	US-10-425-115-298542	Sequence 298542, A
279	31	73.8	163	4	US-10-424-599-183436	Sequence 183436, A	352	30	71.4	113	4	US-10-425-115-306559	Sequence 306559, A
280	31	73.8	163	4	US-10-424-599-183437	Sequence 183437, A	353	30	71.4	116	4	US-10-425-115-231238	Sequence 231238, A
281	31	73.8	176	4	US-10-437-963-190700	Sequence 190700, A	354	30	71.4	123	4	US-10-424-599-202828	Sequence 202828, A
282	31	73.8	180	4	US-10-312-273-113	Sequence 113, App	355	30	71.4	134	4	US-10-437-963-135694	Sequence 135694, A
283	31	73.8	203	4	US-10-312-273-145	Sequence 145, App	356	30	71.4	139	4	US-10-767-701-34156	Sequence 34156, A
284	31	73.8	203	4	US-10-282-122A-54826	Sequence 54826, A	357	30	71.4	139	4	US-10-767-701-39388	Sequence 39388, A
285	31	73.8	203	5	US-10-756-320-3	Sequence 3, Appli	358	30	71.4	155	4	US-10-424-599-155568	Sequence 55568, A
286	31	73.8	206	4	US-10-289-762-879	Sequence 879, App	359	30	71.4	168	4	US-10-424-599-173572	Sequence 173572, A
287	31	73.8	212	4	US-10-289-762-305	Sequence 305, App	360	30	71.4	177	4	US-10-288-998-19	Sequence 19, Appli
288	31	73.8	227	4	US-10-320-797-3073	Sequence 3073, App	361	30	71.4	177	4	US-10-362-692-19	Sequence 19, Appli
289	31	73.8	271	5	US-10-774-355A-2365	Sequence 2365, App	362	30	71.4	177	4	US-10-732-923-13342	Sequence 13342, A
290	31	73.8	321	5	US-09-736-131-4	Sequence 4, Appli	363	30	71.4	177	5	US-10-425-115-239554	Sequence 239554, A
291	31	73.8	329	5	US-10-450-763-40847	Sequence 40847, A	364	30	71.4	215	4	US-10-156-761-12681	Sequence 12681, A
292	31	73.8	334	4	US-10-225-567A-613	Sequence 613, App	365	30	71.4	232	5	US-10-739-930-8835	Sequence 8835, A
293	31	73.8	337	3	US-09-742-732-2	Sequence 2, Appli	366	30	71.4	240	4	US-10-647-196-42	Sequence 42, Appli
294	31	73.8	337	4	US-10-735-991-2	Sequence 4, Appli	367	30	71.4	249	5	US-10-495-148-5	Sequence 49, Appli
295	31	73.8	337	4	US-10-735-991-6	Sequence 6, Appli	368	30	71.4	252	4	US-10-156-136-26	Sequence 26, Appli
296	31	73.8	337	4	US-10-735-991-6	Sequence 6, Appli	369	30	71.4	252	6	US-11-041-419-26	Sequence 26, Appli
297	31	73.8	337	5	US-10-757-262-130	Sequence 130, App	370	30	71.4	272	4	US-10-425-115-339554	Sequence 239554, A
298	31	73.8	337	5	US-10-921-613-2	Sequence 2, Appli	371	30	71.4	272	5	US-10-998-342-4	Sequence 4, Appli
299	31	73.8	350	4	US-10-156-761-1017	Sequence 12017, A	372	30	71.4	276	4	US-10-282-122A-48790	Sequence 48790, A
300	31	73.8	356	4	US-10-425-115-263108	Sequence 263108, A	373	30	71.4	280	5	US-10-774-355A-2543	Sequence 2543, App
301	31	73.8	361	4	US-10-425-114-49989	Sequence 49989, A	374	30	71.4	289	4	US-10-282-122A-65861	Sequence 65861, A
302	31	73.8	369	4	US-10-425-114-65138	Sequence 65138, A	375	30	71.4	289	5	US-10-495-148-6	Sequence 6, Appli
303	31	73.8	378	4	US-10-437-963-118680	Sequence 118680, A	376	30	71.4	309	4	US-10-029-386-33434	Sequence 33434, A
304	31	73.8	388	4	US-10-437-963-192365	Sequence 192365, A	377	30	71.4	310	5	US-10-774-355A-1844	Sequence 1844, App
305	31	73.8	398	5	US-10-450-763-40536	Sequence 40536, A	378	30	71.4	316	5	US-10-774-355A-1854	Sequence 1854, App
306	31	73.8	413	4	US-10-104-047-2399	Sequence 2399, App	379	30	71.4	316	5	US-10-774-355A-1904	Sequence 1904, App
307	31	73.8	417	4	US-10-335-977-6182	Sequence 6182, App	380	30	71.4	316	5	US-10-774-355A-2519	Sequence 2519, App
308	31	73.8	419	4	US-10-669-161-84	Sequence 84, Appli	381	30	71.4	318	4	US-10-041-615-79	Sequence 79, Appli
309	31	73.8	422	3	US-09-815-242-5208	Sequence 5208, App	382	30	71.4	318	4	US-10-297-021-18	Sequence 18, Appli
310	31	73.8	422	4	US-10-282-122A-43470	Sequence 43470, App	383	30	71.4	333	4	US-10-437-963-176956	Sequence 38, Appli
311	31	73.8	431	4	US-10-369-493-19974	Sequence 13974, A	384	30	71.4	334	6	US-11-097-163-9903	Sequence 39003, A
312	31	73.8	434	4	US-10-669-161-86	Sequence 86, Appli	385	30	71.4	334	6	US-10-925-301-1043	Sequence 9833, App
313	31	73.8	464	3	US-09-823-038A-47	Sequence 47, Appli	386	30	71.4	343	3	US-10-156-761-9383	Sequence 9383, App
314	31	73.8	464	3	US-09-989-545-4	Sequence 4, Appli	387	30	71.4	346	4	US-10-424-599-231529	Sequence 231529, A
315	31	73.8	464	3	US-09-989-545-6	Sequence 6, Appli	388	30	71.4	355	4	US-09-886-055-127	Sequence 127, App
316	31	73.8	464	4	US-10-091-333-7	Sequence 7, Appli	389	30	71.4	359	3	US-09-804-291-127	Sequence 127, App
317	31	73.8	464	4	US-10-156-761-10151	Sequence 10151, A	390	30	71.4	359	4	US-10-017-161-338	Sequence 338, App
318	31	73.8	464	4	US-10-325-878-7	Sequence 7, Appli	391	30	71.4	359	4	US-10-017-161-338	Sequence 338, App
319	31	73.8	464	6	US-11-120-777-4	Sequence 4, Appli	392	30	71.4	359	4	US-10-292-798-302	Sequence 302, App

393	30	71.4	359	5	US-10-819-316-127	Sequence 127, App	466	29	69.0	9	5	US-10-871-138-81	Sequence 81, App1
394	30	71.4	372	4	US-10-437-963-136993	Sequence 136993,	467	29	69.0	9	5	US-10-751-845-104	Sequence 104, App
395	30	71.4	375	5	US-10-724-972A-6664	Sequence 6664, Ap	468	29	69.0	10	3	US-09-891-823-91	Sequence 91, App1
396	30	71.4	375	5	US-10-501-282-3868	Sequence 3868, Ap	469	29	69.0	10	3	US-09-891-823-131	Sequence 131, App1
397	30	71.4	377	5	US-10-521-882-1924	Sequence 1924, Ap	470	29	69.0	10	3	US-09-888-721-8	Sequence 8, App1
398	30	71.4	382	5	US-10-723-860-2197	Sequence 2197, Ap	471	29	69.0	10	4	US-10-365-908-91	Sequence 91, App1
399	30	71.4	383	4	US-10-114-153-46	Sequence 46, App1	472	29	69.0	10	4	US-10-365-908-131	Sequence 131, App
400	30	71.4	383	4	US-10-114-153-48	Sequence 48, App1	473	29	69.0	10	4	US-10-668-400-10	Sequence 10, App1
401	30	71.4	392	4	US-10-156-761-10619	Sequence 10619, A	474	29	69.0	10	5	US-10-871-138-91	Sequence 91, App1
402	30	71.4	403	4	US-10-424-599-202980	Sequence 202980,	475	29	69.0	10	5	US-10-871-138-131	Sequence 131, App
403	30	71.4	405	4	US-10-369-493-13163	Sequence 13163, A	476	29	69.0	10	5	US-10-484-063-18	Sequence 18, App1
404	30	71.4	420	4	US-10-432-934-46	Sequence 46, App1	477	29	69.0	11	3	US-09-759-960-31	Sequence 31, App1
405	30	71.4	424	4	US-10-127-032-94	Sequence 94, App1	478	29	69.0	11	5	US-10-603-062-31	Sequence 31, App1
406	30	71.4	432	4	US-10-156-761-7695	Sequence 7695, App	479	29	69.0	18	3	US-09-759-130B-157	Sequence 157, App
407	30	71.4	441	4	US-10-369-493-17287	Sequence 17287, A	480	29	69.0	18	4	US-10-741-790-157	Sequence 157, App
408	30	71.4	442	4	US-10-437-963-168008	Sequence 168008,	481	29	69.0	27	3	US-09-864-761-44831	Sequence 44831, A
409	30	71.4	456	4	US-10-282-122A-59511	Sequence 59511, A	482	29	69.0	41	4	US-10-425-115-228502	Sequence 228502,
410	30	71.4	460	4	US-10-424-599-244633	Sequence 244633,	483	29	69.0	55	4	US-10-424-599-231568	Sequence 231568,
411	30	71.4	460	4	US-10-425-114-43775	Sequence 43775, A	484	29	69.0	57	4	US-10-429-386-30158	Sequence 30158, A
412	30	71.4	479	4	US-10-432-585-7416	Sequence 7416, Ap	485	29	69.0	60	4	US-10-437-963-171561	Sequence 171561,
413	30	71.4	479	4	US-10-389-566-2384	Sequence 2384, Ap	486	29	69.0	70	4	US-10-425-115-327053	Sequence 327053,
414	30	71.4	484	4	US-10-369-493-7596	Sequence 7596, Ap	487	29	69.0	82	4	US-10-424-599-198471	Sequence 198471,
415	30	71.4	486	4	US-10-425-115-325328	Sequence 325328,	488	29	69.0	86	4	US-10-425-115-185457	Sequence 185457,
416	30	71.4	489	4	US-10-156-761-8760	Sequence 8760, Ap	489	29	69.0	87	4	US-10-424-599-221544	Sequence 221544,
417	30	71.4	492	4	US-10-332-447-23	Sequence 23, App1	490	29	69.0	88	4	US-10-424-599-203029	Sequence 203029,
418	30	71.4	500	5	US-10-732-923-13511	Sequence 13511, App1	491	29	69.0	91	4	US-10-425-115-326658	Sequence 326658,
419	30	71.4	505	5	US-10-732-923-22124	Sequence 22124, A	492	29	69.0	93	3	US-09-759-130B-185	Sequence 185, App
420	30	71.4	519	4	US-10-437-963-151684	Sequence 151684,	493	29	69.0	93	4	US-10-741-790-155	Sequence 155, App
421	30	71.4	527	4	US-10-425-115-34610	Sequence 34610,	494	29	69.0	96	3	US-09-864-408A-6012	Sequence 6012, Ap
422	30	71.4	531	4	US-10-282-122A-48555	Sequence 48555, A	495	29	69.0	97	4	US-10-424-599-284907	Sequence 284907,
423	30	71.4	547	6	US-11-097-143-34167	Sequence 34167, A	496	29	69.0	98	3	US-09-820-780A-55	Sequence 55, App1
424	30	71.4	549	3	US-09-115-150-4	Sequence 4, App1	497	29	69.0	100	4	US-10-767-871-55613	Sequence 55613, A
425	30	71.4	549	3	US-09-815-242-10680	Sequence 10680, A	498	29	69.0	100	4	US-10-425-115-212476	Sequence 212476,
426	30	71.4	549	4	US-10-282-122A-57093	Sequence 57093, A	499	29	69.0	106	4	US-10-489-765-22571	Sequence 22571, App
427	30	71.4	575	4	US-10-437-963-199977	Sequence 199977,	500	29	69.0	106	4	US-10-425-115-254773	Sequence 254773,
428	30	71.4	611	3	US-09-748-107-4	Sequence 4, App1	501	29	69.0	108	4	US-10-424-599-217923	Sequence 217923,
429	30	71.4	611	5	US-10-281-346-4	Sequence 4, App1	502	29	69.0	112	4	US-10-360-101-261	Sequence 261, App
430	30	71.4	611	5	US-10-732-923-22122	Sequence 22122, A	503	29	69.0	114	4	US-10-410-842A-4	Sequence 4, App1
431	30	71.4	611	5	US-10-732-923-22123	Sequence 22123, A	504	29	69.0	115	3	US-09-759-130B-153	Sequence 153, App
432	30	71.4	611	6	US-11-097-143-10539	Sequence 10539, A	505	29	69.0	115	4	US-10-741-790-153	Sequence 153, App
433	30	71.4	614	6	US-11-097-143-35565	Sequence 35565, A	506	29	69.0	120	4	US-10-424-599-166176	Sequence 166176,
434	30	71.4	705	6	US-11-097-143-10386	Sequence 10386, A	507	29	69.0	123	4	US-10-424-599-275017	Sequence 275017,
435	30	71.4	723	4	US-10-425-115-288866	Sequence 288866,	508	29	69.0	126	3	US-09-867-550-1454	Sequence 1454, Ap
436	30	71.4	749	4	US-10-437-963-136227	Sequence 136227,	509	29	69.0	130	4	US-10-425-115-274846	Sequence 274846,
437	30	71.4	842	4	US-10-156-761-11064	Sequence 11064, A	510	29	69.0	153	4	US-10-437-963-177985	Sequence 177985,
438	30	71.4	1003	5	US-10-732-923-22128	Sequence 22128, A	511	29	69.0	156	4	US-10-335-977-7727	Sequence 7727, Ap
439	30	71.4	1179	4	US-10-408-765A-2334	Sequence 2334, Ap	512	29	69.0	158	4	US-10-437-963-189931	Sequence 189931,
440	30	71.4	1266	5	US-10-936-626-154	Sequence 154, App	513	29	69.0	162	3	US-10-322-281-17	Sequence 17, App1
441	30	71.4	1266	5	US-10-938-061-154	Sequence 154, App	514	29	69.0	162	3	US-09-918-715-303	Sequence 303, App
442	30	71.4	1283	4	US-10-437-963-143585	Sequence 143585,	515	29	69.0	162	4	US-10-424-599-152136	Sequence 152136,
443	30	71.4	1281	5	US-10-489-740-5047	Sequence 5047, Ap	516	29	69.0	162	4	US-10-474-794-303	Sequence 303, App
444	30	71.4	1349	6	US-11-097-143-5091	Sequence 157, App	517	29	69.0	162	5	US-10-979-159-308	Sequence 303, App
445	30	71.4	1823	4	US-10-437-963-143574	Sequence 5091, Ap	518	29	69.0	164	4	US-10-335-977-7728	Sequence 7728, Ap
446	30	71.4	1833	4	US-10-282-122A-73861	Sequence 73861, A	519	29	69.0	169	4	US-10-424-599-285378	Sequence 285378,
447	30	71.4	1876	5	US-10-719-547-21	Sequence 21, App1	520	29	69.0	173	4	US-10-264-421-1974	Sequence 1974, Ap
448	30	71.4	3391	5	US-10-871-775-31	Sequence 31, App1	521	29	69.0	183	6	US-11-097-143-27039	Sequence 27039, A
449	30	71.4	3391	5	US-10-760-493-25	Sequence 25, App1	522	29	69.0	189	4	US-10-424-599-250213	Sequence 250213,
450	30	71.4	6751	5	US-10-760-493-21	Sequence 21, App1	523	29	69.0	192	6	US-11-097-143-2925	Sequence 2925, Ap
451	30	71.4	8147	5	US-09-759-960-21	Sequence 21, App1	524	29	69.0	208	4	US-10-264-049-2796	Sequence 2796, Ap
452	29	69.0	9	3	US-09-891-823-50	Sequence 50, App1	525	29	69.0	211	3	US-10-156-761-144227	Sequence 14227, A
453	29	69.0	9	3	US-09-891-823-81	Sequence 81, App1	526	29	69.0	216	4	US-09-978-360A-671	Sequence 671, App
454	29	69.0	9	3	US-10-128-711-70	Sequence 70, App1	527	29	69.0	220	4	US-10-433-287-4	Sequence 4, App1
455	29	69.0	9	4	US-10-365-908-50	Sequence 50, App1	528	29	69.0	230	5	US-10-617-320-3066	Sequence 3066, Ap
456	29	69.0	9	4	US-10-365-908-81	Sequence 81, App1	529	29	69.0	234	3	US-09-871-874-20	Sequence 20, App1
457	29	69.0	9	4	US-10-400-991-77	Sequence 77, App1	530	29	69.0	237	4	US-10-365-742-102	Sequence 102, App
458	29	69.0	9	4	US-10-472-661-9	Sequence 9, App1	531	29	69.0	239	4	US-10-282-122A-55381	Sequence 55381, A
459	29	69.0	9	4	US-10-777-053-327	Sequence 327, App	532	29	69.0	240	5	US-10-474-776-358	Sequence 358, App
460	29	69.0	9	4	US-10-777-053-494	Sequence 494, App	533	29	69.0	240	5	US-10-472-928-3388	Sequence 3388, Ap
461	29	69.0	9	4	US-10-837-217-327	Sequence 327, App	534	29	69.0	254	3	US-09-919-039-158	Sequence 158, App
462	29	69.0	9	4	US-10-837-217-494	Sequence 494, App	535	29	69.0	254	4	US-10-012-542-333	Sequence 333, App
463	29	69.0	9	5	US-10-603-062-21	Sequence 21, App1	536	29	69.0	254	4	US-10-115-123-333	Sequence 333, App
464	29	69.0	9	5	US-10-603-062-21	Sequence 21, App1	537	29	69.0	254	4	US-10-800-834-333	Sequence 333, App
465	29	69.0	9	5	US-10-871-138-50	Sequence 50, App1	538	29	69.0	257	4	US-10-425-114-41530	Sequence 41530, A

539	29	69.0	257	4	US-10-425-114-42906	Sequence 42906, A	612	29	69.0	427	4	US-10-291-737-2	Sequence 2, Appl1
540	29	69.0	257	4	US-10-425-115-310215	Sequence 310215, A	613	29	69.0	427	4	US-10-365-564-2	Sequence 2, Appl1
541	29	69.0	258	5	US-10-617-320-4719	Sequence 4719, Ap	614	29	69.0	428	5	US-10-450-763-48608	Sequence 48608, A
542	29	69.0	258	5	US-10-501-282-4226	Sequence 4226, Ap	615	29	69.0	429	3	US-09-815-242-11956	Sequence 11956, A
543	29	69.0	263	5	US-10-472-928-3528	Sequence 2528, Ap	616	29	69.0	430	4	US-10-282-122A-66551	Sequence 66551, A
544	29	69.0	263	4	US-10-424-599-182810	Sequence 182810, A	617	29	69.0	430	3	US-09-057-951-2	Sequence 2, Appl1
545	29	69.0	263	4	US-10-282-122A-56079	Sequence 56079, A	618	29	69.0	430	3	US-09-836-607-2	Sequence 2, Appl1
546	29	69.0	275	4	US-10-156-761-7735	Sequence 7735, Ap	619	29	69.0	430	4	US-09-421-112-2	Sequence 2, Appl1
547	29	69.0	278	4	US-10-282-122A-73146	Sequence 73146, A	620	29	69.0	430	4	US-10-146-574-2	Sequence 2, Appl1
548	29	69.0	281	4	US-10-282-122A-56496	Sequence 56496, A	621	29	69.0	430	4	US-10-157-031-265	Sequence 265, App
549	29	69.0	281	4	US-10-282-122A-59663	Sequence 59663, A	622	29	69.0	430	4	US-10-322-281-522	Sequence 522, App
550	29	69.0	281	4	US-10-282-122A-75139	Sequence 75139, A	623	29	69.0	431	4	US-10-282-122A-61505	Sequence 61505, A
551	29	69.0	284	4	US-10-424-599-440574	Sequence 440574, A	624	29	69.0	431	5	US-10-450-763-60415	Sequence 60415, A
552	29	69.0	292	4	US-10-282-122A-58192	Sequence 58192, A	625	29	69.0	431	5	US-10-450-763-60415	Sequence 60415, A
553	29	69.0	296	3	US-09-873-880-34	Sequence 34, Appl1	626	29	69.0	435	4	US-10-369-493-15842	Sequence 15842, A
554	29	69.0	297	4	US-10-425-115-348596	Sequence 348596, A	627	29	69.0	435	4	US-10-369-493-15842	Sequence 4, Appl1
555	29	69.0	299	3	US-09-832-522-78	Sequence 78, Appl1	628	29	69.0	436	4	US-10-369-493-16221	Sequence 14221, A
556	29	69.0	307	3	US-09-800-321A-53	Sequence 53, Appl1	629	29	69.0	437	5	US-10-450-763-44424	Sequence 44424, A
557	29	69.0	307	3	US-09-795-271-80	Sequence 80, Appl1	630	29	69.0	439	4	US-10-369-493-9325	Sequence 9325, Ap
558	29	69.0	307	4	US-10-005-041A-92	Sequence 92, Appl1	631	29	69.0	439	4	US-10-369-493-9377	Sequence 9377, Ap
559	29	69.0	307	4	US-10-041-615-42	Sequence 42, Appl1	632	29	69.0	440	4	US-10-424-599-253715	Sequence 253715, A
560	29	69.0	307	5	US-10-774-355A-1644	Sequence 1644, Ap	633	29	69.0	441	3	US-09-871-874-21	Sequence 21, Appl1
561	29	69.0	309	5	US-10-450-763-47024	Sequence 47024, A	634	29	69.0	441	3	US-09-895-686-1	Sequence 1, Appl1
562	29	69.0	311	4	US-10-425-115-397819	Sequence 297819, A	635	29	69.0	443	4	US-10-415-378-10	Sequence 10, Appl1
563	29	69.0	312	4	US-10-012-542-343	Sequence 343, App	636	29	69.0	443	5	US-10-501-282-4230	Sequence 4230, Ap
564	29	69.0	312	4	US-10-115-123-343	Sequence 343, App	637	29	69.0	446	3	US-09-871-874-10	Sequence 10, Appl1
565	29	69.0	312	4	US-10-800-834-343	Sequence 343, App	638	29	69.0	449	4	US-09-882-227-406	Sequence 406, App
566	29	69.0	313	3	US-09-908-006A-56	Sequence 56, Appl1	639	29	69.0	449	4	US-10-335-977-5387	Sequence 5387, App
567	29	69.0	313	4	US-10-424-599-178739	Sequence 178739, A	640	29	69.0	451	3	US-09-871-874-9	Sequence 9, Appl1
568	29	69.0	320	4	US-10-081-816-20	Sequence 20, Appl1	641	29	69.0	451	3	US-09-871-874-13	Sequence 13, Appl1
569	29	69.0	323	3	US-09-903-395-2	Sequence 2, Appl1	642	29	69.0	451	4	US-10-369-493-17943	Sequence 17943, A
570	29	69.0	323	5	US-10-288-160-12	Sequence 12, Appl1	643	29	69.0	453	4	US-10-325-6767-621	Sequence 621, App
571	29	69.0	323	5	US-10-603-249-2	Sequence 2, Appl1	644	29	69.0	453	4	US-10-369-493-8947	Sequence 8947, Ap
572	29	69.0	334	4	US-10-108-260A-4241	Sequence 4241, Ap	645	29	69.0	454	4	US-10-369-493-15412	Sequence 15412, A
573	29	69.0	334	4	US-10-335-977-5384	Sequence 5384, Ap	646	29	69.0	457	4	US-10-282-122A-47838	Sequence 47838, A
574	29	69.0	336	5	US-10-732-923-2443	Sequence 2443, Ap	647	29	69.0	460	4	US-10-369-493-17052	Sequence 17052, A
575	29	69.0	340	3	US-09-741-233A-4	Sequence 4, Appl1	648	29	69.0	461	4	US-10-369-493-11223	Sequence 11223, A
576	29	69.0	345	3	US-09-815-242-13259	Sequence 13259, A	649	29	69.0	461	4	US-10-156-761-8893	Sequence 8893, Ap
577	29	69.0	356	4	US-09-769-744A-102	Sequence 102, App	650	29	69.0	463	4	US-10-369-493-10517	Sequence 10517, A
578	29	69.0	356	4	US-10-283-122A-74038	Sequence 74038, A	651	29	69.0	465	4	US-10-369-493-3785	Sequence 2385, Ap
579	29	69.0	356	5	US-10-472-928-2810	Sequence 2810, Ap	652	29	69.0	468	5	US-10-732-923-33454	Sequence 23454, A
580	29	69.0	357	4	US-10-282-122A-57934	Sequence 57934, A	653	29	69.0	468	5	US-10-732-923-33435	Sequence 23435, A
581	29	69.0	357	4	US-10-322-281-515	Sequence 515, App	654	29	69.0	470	4	US-10-225-810-20	Sequence 20, Appl1
582	29	69.0	360	5	US-10-732-923-10091	Sequence 10091, A	655	29	69.0	470	4	US-10-369-493-17330	Sequence 17330, A
583	29	69.0	362	5	US-10-732-923-10118	Sequence 10118, A	656	29	69.0	470	4	US-10-369-493-33231	Sequence 23308, A
584	29	69.0	370	5	US-10-732-923-10092	Sequence 10092, A	657	29	69.0	471	5	US-10-732-923-33708	Sequence 29, Appl1
585	29	69.0	371	4	US-10-369-493-22097	Sequence 22097, A	658	29	69.0	472	4	US-10-024-623-29	Sequence 79, Appl1
586	29	69.0	374	4	US-10-369-493-17286	Sequence 17286, A	659	29	69.0	472	4	US-10-154-419-79	Sequence 74, Appl1
587	29	69.0	380	5	US-10-658-884-5	Sequence 5, Appl1	660	29	69.0	472	4	US-10-146-733-74	Sequence 23636, A
588	29	69.0	386	4	US-10-369-493-17792	Sequence 17792, A	661	29	69.0	472	4	US-10-369-493-33536	Sequence 23527, A
589	29	69.0	390	4	US-10-282-122A-57588	Sequence 57588, A	662	29	69.0	472	5	US-10-732-923-33527	Sequence 23561, A
590	29	69.0	393	4	US-10-335-977-5385	Sequence 5385, Ap	663	29	69.0	472	5	US-10-732-923-33561	Sequence 23561, A
591	29	69.0	400	4	US-10-097-065-146	Sequence 146, App	664	29	69.0	472	5	US-10-732-923-33631	Sequence 23666, A
592	29	69.0	400	4	US-10-372-876-116	Sequence 116, App	665	29	69.0	472	5	US-10-732-923-33666	Sequence 23677, A
593	29	69.0	401	3	US-09-871-874-11	Sequence 11, Appl1	666	29	69.0	472	5	US-10-732-923-33677	Sequence 19, Appl1
594	29	69.0	403	3	US-09-826-508-30	Sequence 30, Appl1	667	29	69.0	472	5	US-09-871-874-19	Sequence 4232, Ap
595	29	69.0	403	3	US-09-895-686-5	Sequence 5, Appl1	668	29	69.0	475	5	US-10-501-282-4232	Sequence 70429, A
596	29	69.0	403	4	US-10-097-340-111	Sequence 121, App	669	29	69.0	476	4	US-10-282-122A-70429	Sequence 2, Appl1
597	29	69.0	403	4	US-10-225-567A-599	Sequence 599, App	670	29	69.0	476	4	US-10-146-574-2	Sequence 2, Appl1
598	29	69.0	403	4	US-10-016-656-2	Sequence 2, Appl1	671	29	69.0	476	4	US-10-157-031-265	Sequence 265, App
599	29	69.0	403	4	US-10-600-816-6	Sequence 6, Appl1	672	29	69.0	476	4	US-10-322-281-522	Sequence 522, App
600	29	69.0	403	5	US-10-756-149-5455	Sequence 5455, Ap	673	29	69.0	476	4	US-10-450-763-60415	Sequence 60415, A
601	29	69.0	403	6	US-11-050-926-121	Sequence 121, App	674	29	69.0	486	4	US-10-291-265-723	Sequence 273, App
602	29	69.0	404	4	US-10-282-122A-70261	Sequence 70261, A	675	29	69.0	486	4	US-10-282-122A-58865	Sequence 4228, Ap
603	29	69.0	404	4	US-10-335-977-5386	Sequence 5386, Ap	676	29	69.0	486	4	US-10-282-122A-48866	Sequence 48866, A
604	29	69.0	406	4	US-10-091-007-12	Sequence 12, Appl1	677	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
605	29	69.0	408	3	US-09-057-951-4	Sequence 4, Appl1	678	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
606	29	69.0	408	4	US-10-105-150-4	Sequence 4, Appl1	679	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
607	29	69.0	410	4	US-10-282-122A-48866	Sequence 48866, A	680	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
608	29	69.0	412	5	US-10-501-282-4228	Sequence 4228, Ap	681	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
609	29	69.0	424	4	US-10-047-676A-8	Sequence 8, Appl1	682	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
610	29	69.0	424	5	US-10-790-914-8	Sequence 8, Appl1	683	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A
611	29	69.0	427	3	US-09-826-508-32	Sequence 32, Appl1	684	29	69.0	486	4	US-10-732-923-33673	Sequence 23673, A

685	29	69.0	535	4	US-10-369-493-3824	Sequence 3824, Ap	758	29	69.0	836	5	US-10-855-588-36	Sequence 36, Appl
686	29	69.0	541	4	US-10-369-493-622	Sequence 622, App	759	29	69.0	836	5	US-10-936-626-119	Sequence 119, App
687	29	69.0	551	4	US-10-437-963-146137	Sequence 146137,	760	29	69.0	836	5	US-10-938-061-119	Sequence 119, App
688	29	69.0	550	4	US-10-156-761-13829	Sequence 13829, A	761	29	69.0	836	5	US-10-287-436A-532	Sequence 532, App
689	29	69.0	550	4	US-10-732-923-22791	Sequence 22791, A	762	29	69.0	836	5	US-10-287-436A-1223	Sequence 1223, Ap
690	29	69.0	561	6	US-11-097-143-9282	Sequence 9282, Ap	763	29	69.0	836	5	US-10-631-467-549	Sequence 549, App
691	29	69.0	562	3	US-09-738-626-5317	Sequence 5317, Ap	764	29	69.0	869	5	US-10-825-699-14	Sequence 14, Appl
692	29	69.0	562	4	US-10-781-014-192	Sequence 192, App	765	29	69.0	929	4	US-10-433-794-13	Sequence 13, Appl
693	29	69.0	574	6	US-11-097-143-37815	Sequence 37815, A	766	29	69.0	933	4	US-10-618-941-101	Sequence 101, App
694	29	69.0	575	4	US-10-087-192-930	Sequence 930, App	767	29	69.0	964	4	US-10-437-963-160627	Sequence 160627,
695	29	69.0	575	4	US-10-427-631-14	Sequence 14, App	768	29	69.0	970	3	US-09-795-927-7	Sequence 7, Appl1
696	29	69.0	587	4	US-10-369-493-1555	Sequence 1555, Ap	769	29	69.0	970	4	US-10-345-884-7	Sequence 7, Appl1
697	29	69.0	587	5	US-10-732-923-23759	Sequence 23759, A	770	29	69.0	982	4	US-10-960-789-7	Sequence 7, Appl1
698	29	69.0	626	4	US-10-282-122A-77364	Sequence 77364, A	771	29	69.0	982	4	US-10-341-434-117	Sequence 117, App
699	29	69.0	641	5	US-10-505-486-36	Sequence 36, Appl	772	29	69.0	982	4	US-10-634-574-6	Sequence 6, Appl1
700	29	69.0	665	4	US-10-437-963-144865	Sequence 144865,	773	29	69.0	1001	4	US-10-252-642-8	Sequence 2, Appl1
701	29	69.0	674	4	US-10-282-122A-65142	Sequence 65142, A	774	29	69.0	1010	4	US-10-369-493-6805	Sequence 6805, Ap
702	29	69.0	674	4	US-10-282-122A-65573	Sequence 65573, A	775	29	69.0	1023	4	US-10-437-963-196965	Sequence 196965,
703	29	69.0	679	5	US-10-505-486-85	Sequence 85, Appl	776	29	69.0	1033	3	US-09-888-615-75	Sequence 75, Appl
704	29	69.0	682	4	US-10-085-198-120	Sequence 120, App	777	29	69.0	1034	5	US-10-480-988-5	Sequence 5, Appl1
705	29	69.0	686	4	US-10-176-847-46	Sequence 46, Appl	778	29	69.0	1040	4	US-10-437-963-152835	Sequence 152835,
706	29	69.0	698	5	US-10-732-923-23112	Sequence 23112, A	779	29	69.0	1044	4	US-10-282-122A-69730	Sequence 69730, A
707	29	69.0	699	4	US-10-282-122A-48375	Sequence 48375, A	780	29	69.0	1047	4	US-10-437-963-125880	Sequence 125880,
708	29	69.0	703	5	US-10-620-256-6	Sequence 6, Appl1	781	29	69.0	1050	4	US-10-282-122A-67554	Sequence 67554, A
709	29	69.0	721	5	US-10-855-588-50	Sequence 50, Appl	782	29	69.0	1147	4	US-10-074-978A-116	Sequence 116, App
710	29	69.0	730	4	US-10-217-371-6	Sequence 6, Appl1	783	29	69.0	1188	5	US-10-450-763-38500	Sequence 38500, A
711	29	69.0	735	4	US-10-437-963-134076	Sequence 134076,	784	29	69.0	1158	4	US-10-282-122A-59960	Sequence 59960, A
712	29	69.0	737	5	US-10-732-923-23276	Sequence 23276, A	785	29	69.0	1047	4	US-10-450-763-55382	Sequence 55382, A
713	29	69.0	738	4	US-10-369-493-18058	Sequence 18058, A	786	29	69.0	1047	6	US-11-097-143-12225	Sequence 12225, A
714	29	69.0	749	5	US-10-855-588-48	Sequence 48, Appl	787	29	69.0	1050	4	US-10-282-122A-78451	Sequence 78451, A
715	29	69.0	750	4	US-10-217-371-14	Sequence 14, Appl	788	29	69.0	1449	5	US-10-732-923-1669	Sequence 1669, Ap
716	29	69.0	751	4	US-10-217-371-44	Sequence 44, Appl1	789	29	69.0	1449	5	US-10-732-923-1670	Sequence 1670, Ap
717	29	69.0	751	5	US-10-855-588-46	Sequence 46, Appl	790	29	69.0	1449	5	US-10-332-923-1673	Sequence 1673, Ap
718	29	69.0	751	5	US-10-936-626-121	Sequence 121, App	791	29	69.0	1156	4	US-10-369-493-5843	Sequence 5843, Ap
719	29	69.0	751	5	US-10-938-061-121	Sequence 121, App	792	29	69.0	1158	4	US-10-369-493-5842	Sequence 5842, Ap
720	29	69.0	756	4	US-10-059-585-16	Sequence 16, Appl	793	29	69.0	1815	6	US-11-097-143-31596	Sequence 31596, A
721	29	69.0	758	4	US-10-217-371-10	Sequence 10, Appl	794	29	69.0	1971	5	US-10-450-763-37867	Sequence 37867, A
722	29	69.0	771	4	US-10-217-371-12	Sequence 12, Appl	795	29	69.0	2469	5	US-10-450-763-40815	Sequence 40815, A
723	29	69.0	774	4	US-10-270-333-111	Sequence 111, App	796	29	69.0	3079	4	US-10-369-493-2024	Sequence 2024, Ap
724	29	69.0	774	5	US-10-489-425-2	Sequence 2, Appl1	797	29	69.0	3386	5	US-10-450-763-59460	Sequence 59460, A
725	29	69.0	774	6	US-11-097-143-20703	Sequence 20703, A	798	29	66.7	9	3	US-09-891-823-22	Sequence 22, Appl1
726	29	69.0	779	4	US-10-217-371-8	Sequence 8, Appl1	799	28	66.7	9	4	US-10-365-908-22	Sequence 22, Appl
727	29	69.0	779	4	US-10-171-311-180	Sequence 180, App	800	28	66.7	9	5	US-10-871-138-22	Sequence 22, Appl
728	29	69.0	779	4	US-10-301-822-151	Sequence 151, App	801	28	66.7	9	5	US-10-924-377-13	Sequence 13, Appl
729	29	69.0	779	5	US-10-855-588-44	Sequence 44, Appl	802	28	66.7	10	3	US-09-891-823-42	Sequence 42, Appl
730	29	69.0	779	5	US-10-936-626-123	Sequence 123, App	803	28	66.7	10	5	US-10-365-908-42	Sequence 42, Appl
731	29	69.0	779	5	US-10-938-061-123	Sequence 123, App	804	28	66.7	10	4	US-10-871-138-44	Sequence 44, Appl
732	29	69.0	781	5	US-10-855-588-42	Sequence 42, Appl	805	28	66.7	11	3	US-09-891-823-39	Sequence 39, Appl
733	29	69.0	781	5	US-10-936-626-122	Sequence 122, App	806	28	66.7	11	4	US-10-365-908-39	Sequence 39, Appl
734	29	69.0	781	5	US-10-938-061-122	Sequence 122, App	807	28	66.7	11	5	US-10-871-138-39	Sequence 39, Appl
735	29	69.0	790	3	US-09-925-301-1313	Sequence 1313, Ap	808	28	66.7	15	4	US-10-648-547-78	Sequence 78, Appl
736	29	69.0	806	4	US-10-437-963-134077	Sequence 134077,	809	28	66.7	15	4	US-10-306-541-78	Sequence 78, Appl
737	29	69.0	808	5	US-10-855-588-38	Sequence 38, Appl	810	28	66.7	23	4	US-10-476-570-17	Sequence 17, Appl
738	29	69.0	809	5	US-10-855-588-40	Sequence 40, Appl	811	28	66.7	25	3	US-09-899-235-22	Sequence 22, Appl
739	29	69.0	809	5	US-10-936-626-120	Sequence 120, App	812	28	66.7	41	4	US-10-424-599-234454	Sequence 234454,
740	29	69.0	809	5	US-10-938-061-120	Sequence 120, App	813	28	66.7	46	4	US-10-437-963-144472	Sequence 144472,
741	29	69.0	809	5	US-10-852-335A-126	Sequence 126, App	814	28	66.7	48	4	US-10-200-055-49	Sequence 44, Appl
742	29	69.0	811	5	US-10-631-467-1377	Sequence 1377, Ap	815	28	66.7	51	3	US-09-864-761-47454	Sequence 47454, A
743	29	69.0	836	3	US-09-829-472A-2	Sequence 2, Appl1	816	28	66.7	52	4	US-10-200-055-49	Sequence 49, Appl
744	29	69.0	836	4	US-10-217-371-2	Sequence 2, Appl1	817	28	66.7	59	4	US-10-424-599-239576	Sequence 239576,
745	29	69.0	836	4	US-10-171-311-178	Sequence 178, App	818	28	66.7	63	3	US-09-864-408A-4788	Sequence 4788, Ap
746	29	69.0	836	4	US-10-177-293-342	Sequence 342, App	819	28	66.7	63	4	US-10-424-599-240594	Sequence 240594,
747	29	69.0	836	4	US-10-301-822-149	Sequence 149, App	820	28	66.7	65	4	US-10-425-115-301551	Sequence 301551,
748	29	69.0	836	4	US-10-204-752-33	Sequence 33, Appl	821	28	66.7	63	4	US-10-351-334-164	Sequence 164, App
749	29	69.0	836	4	US-10-295-027-36	Sequence 36, Appl	822	28	66.7	71	4	US-10-425-115-299111	Sequence 299111,
750	29	69.0	836	4	US-10-173-999-67	Sequence 66, Appl	823	28	66.7	73	4	US-10-083-357-773	Sequence 77, Appl
751	29	69.0	836	4	US-10-058-270A-62	Sequence 62, Appl	824	28	66.7	75	3	US-09-864-408A-5594	Sequence 5594, Ap
752	29	69.0	836	4	US-10-188-832-191	Sequence 191, App	825	28	66.7	78	3	US-10-425-115-261715	Sequence 261715,
753	29	69.0	836	4	US-10-610-049-21	Sequence 21, Appl	826	28	66.7	78	4	US-10-425-115-208944	Sequence 208944,
754	29	69.0	836	4	US-10-734-564-90	Sequence 90, Appl	827	28	66.7	79	4	US-10-029-386-28801	Sequence 28801, A
755	29	69.0	836	5	US-10-733-669A-53	Sequence 53, Appl	828	28	66.7	80	4	US-10-425-115-353614	Sequence 353614,
756	29	69.0	836	5	US-10-723-860-1879	Sequence 1879, Ap	829	28	66.7	80	4	US-10-425-115-353614	Sequence 353614,
757	29	69.0	836	5	US-10-696-639-75	Sequence 75, Appl	830	28	66.7	82	4	US-10-437-963-178426	Sequence 178426,

831	28	66.7	82	4	US-10-425-115-289219	Sequence 289219, A	904	28	198	4	US-10-437-963-136735	Sequence 136735, A
832	28	66.7	84	4	US-10-424-599-245453	Sequence 245453, A	905	28	199	4	US-10-424-599-199545	Sequence 199545, A
833	28	66.7	85	3	US-09-989-890-273	Sequence 273, App	906	28	200	4	US-10-425-114-52614	Sequence 52614, A
834	28	66.7	85	4	US-10-344-381A-8	Sequence 8, Appl1	907	28	200	4	US-10-425-114-68713	Sequence 68713, A
835	28	66.7	86	4	US-10-425-115-256239	Sequence 256239, A	908	28	204	4	US-10-424-599-166053	Sequence 166053, A
836	28	66.7	86	6	US-11-006-098-158	Sequence 158, App	909	28	205	4	US-10-424-599-236503	Sequence 236503, A
837	28	66.7	88	6	US-10-425-115-272135	Sequence 272135, A	910	28	208	4	US-10-437-963-168994	Sequence 168994, A
838	28	66.7	90	4	US-10-106-698-5025	Sequence 5025, App	911	28	210	3	US-09-817-664-16	Sequence 16, Appl1
839	28	66.7	92	4	US-10-437-963-150189	Sequence 150189, A	912	28	210	4	US-10-331-289-16	Sequence 16, Appl1
840	28	66.7	92	4	US-10-425-115-104610	Sequence 104610, A	913	28	211	4	US-10-424-599-251076	Sequence 251076, A
841	28	66.7	93	4	US-10-425-115-42674	Sequence 42674, A	914	28	214	4	US-10-425-115-322211	Sequence 322211, A
842	28	66.7	93	4	US-10-425-115-325261	Sequence 325261, A	915	28	214	4	US-10-282-122A-51959	Sequence 51959, A
843	28	66.7	97	4	US-10-424-599-240385	Sequence 240385, A	916	28	214	4	US-10-767-701-36766	Sequence 36766, A
844	28	66.7	98	4	US-10-437-963-200355	Sequence 200355, A	917	28	215	4	US-10-424-599-285018	Sequence 285018, A
845	28	66.7	99	4	US-10-425-115-223587	Sequence 223587, A	918	28	220	4	US-10-425-115-263296	Sequence 263296, A
846	28	66.7	100	4	US-10-425-115-275296	Sequence 275296, A	919	28	221	4	US-10-425-115-263296	Sequence 263296, A
847	28	66.7	102	4	US-10-424-599-245452	Sequence 245452, A	920	28	223	4	US-10-166-653-16	Sequence 16, Appl1
848	28	66.7	104	4	US-10-052-545-1052336	Sequence 10, Appl1	921	28	223	4	US-10-424-599-241709	Sequence 241709, A
849	28	66.7	104	4	US-10-425-115-642336	Sequence 242336, A	922	28	223	6	US-11-116-192-16	Sequence 16, Appl1
850	28	66.7	105	4	US-10-424-599-191459	Sequence 191459, A	923	28	227	4	US-10-282-122A-71130	Sequence 71130, A
851	28	66.7	105	6	US-11-097-143-31266	Sequence 31266, A	924	28	227	4	US-10-282-122A-71423	Sequence 71423, A
852	28	66.7	106	4	US-10-767-701-45006	Sequence 45006, A	925	28	227	4	US-10-724-972A-6349	Sequence 6349, App
853	28	66.7	108	4	US-10-425-115-321086	Sequence 321086, A	926	28	228	4	US-10-282-122A-44721	Sequence 44721, A
854	28	66.7	111	4	US-10-424-599-156415	Sequence 156415, A	927	28	230	4	US-10-437-963-177620	Sequence 177620, A
855	28	66.7	111	4	US-10-425-115-240729	Sequence 240729, A	928	28	236	4	US-10-767-701-37073	Sequence 37073, A
856	28	66.7	115	4	US-10-425-115-254169	Sequence 254169, A	929	28	237	4	US-10-425-115-296440	Sequence 296440, A
857	28	66.7	117	4	US-10-767-701-60618	Sequence 60618, A	930	28	239	4	US-10-425-114-65537	Sequence 65537, A
858	28	66.7	117	4	US-10-425-115-340497	Sequence 340497, A	931	28	240	4	US-10-767-701-39886	Sequence 39886, A
859	28	66.7	119	4	US-10-767-701-43362	Sequence 43362, A	932	28	241	4	US-10-369-493-11825	Sequence 11825, A
860	28	66.7	121	4	US-10-344-381A-7	Sequence 7, Appl1	933	28	241	4	US-10-424-599-173481	Sequence 173481, A
861	28	66.7	126	4	US-10-424-599-164739	Sequence 164739, A	934	28	241	4	US-10-424-599-170201	Sequence 170201, A
862	28	66.7	127	4	US-10-425-115-188916	Sequence 188916, A	935	28	242	4	US-10-424-599-182887	Sequence 182887, A
863	28	66.7	129	4	US-10-437-963-148725	Sequence 148725, A	936	28	242	5	US-10-732-923-15530	Sequence 15530, A
864	28	66.7	130	4	US-10-437-963-141054	Sequence 141054, A	937	28	242	5	US-10-732-923-15530	Sequence 15530, A
865	28	66.7	131	4	US-10-425-115-344592	Sequence 344592, A	938	28	243	4	US-10-424-599-160651	Sequence 160651, A
866	28	66.7	133	4	US-10-282-122A-73147	Sequence 73147, A	939	28	244	4	US-10-156-761-14354	Sequence 14354, A
867	28	66.7	133	4	US-10-425-115-208517	Sequence 208517, A	940	28	248	3	US-09-881-752A-26	Sequence 26, Appl1
868	28	66.7	134	4	US-10-767-701-35249	Sequence 35249, A	941	28	248	3	US-09-895-913A-208	Sequence 208, App
869	28	66.7	143	4	US-10-424-599-153300	Sequence 153300, A	942	28	249	5	US-10-662-126-79	Sequence 29, Appl1
870	28	66.7	146	4	US-10-369-499-21708	Sequence 21708, A	943	28	249	4	US-10-767-701-37419	Sequence 37419, A
871	28	66.7	153	4	US-10-437-963-181751	Sequence 181751, A	944	28	250	4	US-10-424-599-263638	Sequence 263638, A
872	28	66.7	154	4	US-10-017-161-1146	Sequence 1146, App	945	28	255	5	US-10-732-923-18882	Sequence 18882, A
873	28	66.7	157	4	US-10-282-122A-75140	Sequence 75140, A	946	28	257	4	US-10-425-115-127478	Sequence 127478, A
874	28	66.7	157	4	US-10-282-122A-75873	Sequence 75873, A	947	28	258	3	US-08-738-626-4217	Sequence 4217, App
875	28	66.7	158	4	US-10-437-963-152845	Sequence 152845, A	948	28	258	4	US-10-425-114-53220	Sequence 53220, A
876	28	66.7	159	4	US-10-264-237-1560	Sequence 1560, App	949	28	258	4	US-10-425-114-55267	Sequence 55267, A
877	28	66.7	159	4	US-10-424-599-244883	Sequence 244883, A	950	28	258	4	US-10-425-114-57562	Sequence 57562, A
878	28	66.7	161	4	US-10-165-603-30	Sequence 30, Appl1	951	28	258	6	US-11-006-098-156	Sequence 156, App
879	28	66.7	161	4	US-10-794-899-64	Sequence 64, Appl1	952	28	261	4	US-10-437-963-152442	Sequence 152442, A
880	28	66.7	163	4	US-10-220-946-4	Sequence 4, Appl1	953	28	263	4	US-10-425-114-66734	Sequence 66734, A
881	28	66.7	164	4	US-10-425-115-263193	Sequence 263193, A	954	28	264	6	US-11-097-143-31096	Sequence 31096, A
882	28	66.7	164	4	US-10-425-115-289100	Sequence 289100, A	955	28	266	4	US-10-425-115-247511	Sequence 247511, A
883	28	66.7	166	4	US-10-424-599-258671	Sequence 258671, A	956	28	267	5	US-10-450-763-59308	Sequence 59308, A
884	28	66.7	174	4	US-10-156-761-10873	Sequence 10873, A	957	28	267	4	US-10-450-763-59308	Sequence 59308, A
885	28	66.7	174	4	US-10-425-114-44776	Sequence 44776, A	958	28	272	4	US-10-424-599-173432	Sequence 173432, A
886	28	66.7	180	3	US-09-393-634-33	Sequence 33, Appl1	959	28	273	5	US-10-732-923-908	Sequence 908, App
887	28	66.7	180	3	US-10-383-982-33	Sequence 33, Appl1	960	28	279	4	US-10-437-963-109039	Sequence 109039, A
888	28	66.7	180	4	US-10-364-861-33	Sequence 33, Appl1	961	28	281	4	US-10-282-122A-75871	Sequence 75871, A
889	28	66.7	180	4	US-10-437-963-16736	Sequence 136736, A	962	28	287	3	US-10-057-321-5	Sequence 5, Appl1
890	28	66.7	180	4	US-10-767-701-45005	Sequence 45005, A	963	28	287	4	US-10-784-300-5	Sequence 5, Appl1
891	28	66.7	180	4	US-10-425-115-284329	Sequence 284329, A	964	28	288	4	US-10-282-122A-65503	Sequence 65503, A
892	28	66.7	180	4	US-10-425-115-33907	Sequence 33907, A	965	28	288	4	US-10-310-154-379	Sequence 379, App
893	28	66.7	181	5	US-10-739-930-10598	Sequence 10598, A	966	28	291	5	US-10-732-923-335	Sequence 435, App
894	28	66.7	187	4	US-10-437-963-116615	Sequence 116615, A	967	28	291	5	US-10-732-923-335	Sequence 909, App
895	28	66.7	191	4	US-10-425-114-63286	Sequence 63286, A	968	28	292	5	US-10-732-923-38891	Sequence 18891, A
896	28	66.7	192	3	US-09-764-853-566	Sequence 566, App	969	28	292	5	US-10-032-585-7473	Sequence 21943, App
897	28	66.7	193	4	US-10-282-122A-45246	Sequence 45246, A	970	28	293	4	US-10-774-355A-2194	Sequence 2194, App
898	28	66.7	193	4	US-10-767-701-39702	Sequence 39702, A	971	28	295	5	US-10-282-122A-66306	Sequence 66306, A
899	28	66.7	194	3	US-09-738-626-4049	Sequence 4049, App	972	28	301	4	US-10-024-212-146	Sequence 146, App
900	28	66.7	194	4	US-10-424-599-251802	Sequence 251802, A	973	28	304	4	US-10-243-552-106	Sequence 606, App
901	28	66.7	194	4	US-10-425-114-52711	Sequence 52711, A	974	28	305	4	US-10-282-122A-78251	Sequence 78251, A
902	28	66.7	197	4	US-10-437-963-107110	Sequence 107110, A	975	28	305	4	US-10-282-122A-78251	Sequence 78251, A
903	28	66.7	198	4	US-10-424-599-179039	Sequence 179039, A	976	28	307	5	US-10-774-355A-1741	Sequence 1741, App

977 28 66.7 308 6 US-11-097-143-39171 Sequence 39171, A
978 28 66.7 309 3 US-09-510-332-129 Sequence 129, App
979 28 66.7 309 4 US-10-024-312-124 Sequence 124, App
980 28 66.7 309 4 US-10-292-798-90 Sequence 90, App1
981 28 66.7 309 4 US-10-770-127-129 Sequence 129, App
982 28 66.7 309 5 US-10-962-365-129 Sequence 129, App
983 28 66.7 310 5 US-10-774-355A-1845 Sequence 1845, App
984 28 66.7 311 5 US-10-732-923-11896 Sequence 11896, A
985 28 66.7 312 4 US-10-425-114-36975 Sequence 36975, A
986 28 66.7 313 4 US-10-156-761-14793 Sequence 14793, A
987 28 66.7 313 4 US-10-289-762-275 Sequence 275, App
988 28 66.7 314 3 US-09-886-055-357 Sequence 357, App
989 28 66.7 314 3 US-09-804-291-357 Sequence 357, App
990 28 66.7 314 3 US-10-017-161-368 Sequence 368, App1
991 28 66.7 314 4 US-10-024-212-64 Sequence 64, App1
992 28 66.7 314 4 US-10-292-798-330 Sequence 330, App
993 28 66.7 314 4 US-10-343-650A-440 Sequence 440, App
994 28 66.7 314 4 US-10-476-204-5 Sequence 5, App1
995 28 66.7 314 5 US-10-774-355A-2509 Sequence 2509, App
996 28 66.7 314 5 US-10-819-316-357 Sequence 357, App
997 28 66.7 316 4 US-10-023-601-32 Sequence 32, App1
998 28 66.7 316 5 US-10-774-355A-1787 Sequence 1787, App
999 28 66.7 318 4 US-10-292-798-244 Sequence 244, App
1000 28 66.7 318 4 US-10-292-798-244 Sequence 244, App

ALIGNMENTS

RESULT 1
US-09-759-960-1
; Sequence 1, Application US/09759960
; Patent No. US20010006639A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chlitz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

US-09-759-960-1
Query Match 100.0%; Score 42; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLMGTIGIV 9
DB 1 LLMGTIGIV 9

RESULT 2
US-09-891-823-5
; Sequence 5, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:
; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/09/891,823
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-891-823-5

Query Match 100.0%; Score 42; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLMGTIGIV 9
DB 1 LLMGTIGIV 9

RESULT 3
US-09-909-460-106
; Sequence 106, Application US/09909460
; Publication No. US20020182258A1
; GENERAL INFORMATION:
; APPLICANT: Lunstford, Lynn B.
; APPLICANT: Putnam, David
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
; TITLE OF INVENTION: ACID
; FILE REFERENCE: 08191/014001
; CURRENT APPLICATION NUMBER: US/09/909,460
; CURRENT FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 106
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-909-460-106

Query Match 100.0%; Score 42; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLMGTIGIV 9
DB 1 LLMGTIGIV 9

Db 1 LHMGTGIV 9

RESULT 4

US-09-872-836-106
; Sequence 106, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
; APPLICANT: Barman, Shikha P.
; APPLICANT: McKeever, Una
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 106
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-106

Query Match 100.0%; Score 42; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LHMGTGIV 9
Db 1 LHMGTGIV 9

RESULT 5

US-09-872-836-111
; Sequence 111, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
; APPLICANT: Barman, Shikha P.
; APPLICANT: McKeever, Una
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 111
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-111

Query Match 100.0%; Score 42; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LHMGTGIV 9
Db 1 LHMGTGIV 9

RESULT 6

US-10-128-711-65
; Sequence 65, Application US/10128711
; Publication No. US20030099634A1
; GENERAL INFORMATION:
; APPLICANT: VITIELLO, Maria A.
; CHESTNUT, Robert W.
; SETTE, Alessandro D.

CELSIS, Esteaban
GRAY, Howard
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; CTL IMMUNITY

NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Kourile and Crew
STREET: Steuart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/128,711
FILING DATE: 22-Apr-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991

ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793

INFORMATION FOR SEQ ID NO: 65:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 65:
US-10-128-711-65

Query Match 100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LHMGTGIV 9
Db 1 LHMGTGIV 9

RESULT 7

US-10-133-210-275
; Sequence 275, Application US/10133210
; Publication No. US20030103964A1
; GENERAL INFORMATION:
; APPLICANT: Delisi, Charles
; APPLICANT: Berzofsky, Jay
; APPLICANT: Gulukota, Kamalakara
; APPLICANT: Vaccaro, Dennis
; APPLICANT: Wang, Zhiping
; TITLE OF INVENTION: METHODS FOR DESIGNING MOLECULAR CONJUGATES AND
; FILE REFERENCE: BU-035AX
; CURRENT APPLICATION NUMBER: US/10/133,210

```
/ CURRENT FILING DATE: 2002-04-26
/ NUMBER OF SEQ ID NOS: 281
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 275
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-133-210-275
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
Db 1 LLMGTLGIV 9
```

```
RESULT 8
US-10-052-578-314
/ Sequence 314, Application US/10052578
/ Publication No. US20030134787A1
/ GENERAL INFORMATION:
/ APPLICANT: Sloan-Kettering Institute for Cancer Research
/ APPLICANT: Rothman, James E.
/ APPLICANT: Mayhew, Mark
/ APPLICANT: Hoe, Mee H.
/ APPLICANT: Houghton, Alan
/ APPLICANT: Hartl, Ulrich
/ APPLICANT: Querfeldt, Quathek
/ APPLICANT: Moroi, Yoichi
/ TITLE OF INVENTION: CONJUGATE HEAT SHOCK PROTEIN-BINDING PEPTIDES
/ FILE REFERENCE: 11746/46003
/ CURRENT APPLICATION NUMBER: US/10/052,578
/ CURRENT FILING DATE: 2002-01-17
/ PRIOR APPLICATION NUMBER: 08/961,707
/ PRIOR FILING DATE: 1997-10-31
/ NUMBER OF SEQ ID NOS: 321
/ SOFTWARE: WordPerfect 8.0 for Windows
/ SEQ ID NO 314
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: peptide in ml3 coliphage
US-10-052-578-314
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
Db 1 LLMGTLGIV 9
```

```
RESULT 9
US-10-053-520-314
/ Sequence 314, Application US/10053520
/ Publication No. US20030165530A1
/ GENERAL INFORMATION:
/ APPLICANT: Sloan-Kettering Institute for Cancer Research
/ APPLICANT: Rothman, James E.
/ APPLICANT: Mayhew, Mark
/ APPLICANT: Hoe, Mee H.
/ APPLICANT: Houghton, Alan
/ APPLICANT: Hartl, Ulrich
/ APPLICANT: Querfeldt, Quathek
/ APPLICANT: Moroi, Yoichi
/ TITLE OF INVENTION: CONJUGATE HEAT SHOCK PROTEIN-BINDING PEPTIDES
/ FILE REFERENCE: 11746/46004
```

```
/ CURRENT APPLICATION NUMBER: US/10/053,520
/ CURRENT FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: 08/961,707
/ PRIOR FILING DATE: 1997-10-31
/ NUMBER OF SEQ ID NOS: 321
/ SOFTWARE: WordPerfect 8.0 for Windows
/ SEQ ID NO 314
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: peptide in ml3 coliphage
US-10-053-520-314
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
Db 1 LLMGTLGIV 9
```

```
RESULT 10
US-10-365-908-5
/ Sequence 5, Application US/10365908
/ Publication No. US20030170268A1
/ GENERAL INFORMATION:
/ APPLICANT: Neeffe, John R.
/ APPLICANT: Boux, Leslie J.
/ APPLICANT: Winnett, Mark T.
/ APPLICANT: Goldstone, Stephen E.
/ APPLICANT: Siegel, Marvin
/ TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
/ FILE REFERENCE: 12071-003001
/ CURRENT APPLICATION NUMBER: US/10/365,908
/ CURRENT FILING DATE: 2003-02-13
/ PRIOR APPLICATION NUMBER: US/09/891,823
/ PRIOR FILING DATE: 2001-10-19
/ PRIOR APPLICATION NUMBER: US 60/214,202
/ PRIOR FILING DATE: 2000-06-26
/ NUMBER OF SEQ ID NOS: 140
/ SOFTWARE: PastsEq for Windows Version 4.0
/ SEQ ID NO 5
/ LENGTH: 9
/ TYPE: PRT
/ ORGANISM: Human papilloma virus
US-10-365-908-5
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
Db 1 LLMGTLGIV 9
```

```
RESULT 11
US-10-053-498B-314
/ Sequence 314, Application US/10053498B
/ Publication No. US20030194409A1
/ GENERAL INFORMATION:
/ APPLICANT: Sloan-Kettering Institute for Cancer Research
/ APPLICANT: Rothman, James E.
/ APPLICANT: Mayhew, Mark
/ APPLICANT: Hoe, Mee H.
/ APPLICANT: Houghton, Alan
/ APPLICANT: Hartl, Ulrich
/ APPLICANT: Querfeldt, Quathek
/ APPLICANT: Moroi, Yoichi
/ TITLE OF INVENTION: CONJUGATE HEAT SHOCK PROTEIN-BINDING PEPTIDES
/ FILE REFERENCE: 11746/46002
```

```

; CURRENT APPLICATION NUMBER: US/10/053.4988
; CURRENT FILING DATE: 2002-01-17
; PRIOR APPLICATION NUMBER: 08/961,707
; PRIOR FILING DATE: 1997-10-31
; NUMBER OF SEQ ID NOS: 321
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 314
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: peptide in m13 coliphage
US-10-053-4988-314

Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
   |||||
Db 1 LLMGTLGIV 9

RESULT 12
US-10-367-580-88
; Sequence 88, Application US/10367580
; Publication No. US20040071720A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takeuchi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461061
; CURRENT APPLICATION NUMBER: US/10/367,580
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/794,832
; PRIOR FILING DATE: 2001-02-27
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 88
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-580-88

Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
   |||||
Db 1 LLMGTLGIV 9

RESULT 13
US-10-367-593-88
; Sequence 88, Application US/10367593
; Publication No. US20040071721A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
```

```

; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takeuchi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461012
; CURRENT APPLICATION NUMBER: US/10/367,593
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 88
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-594-88

Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
   |||||
Db 1 LLMGTLGIV 9

RESULT 14
US-10-367-594-88
; Sequence 88, Application US/10367594
; Publication No. US20040071722A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James E.
; APPLICANT: Hartl, F. Ulrich
; APPLICANT: Hoe, Mee H.
; APPLICANT: Houghton, Alan
; APPLICANT: Takeuchi, Yoshizumi
; APPLICANT: Mayhew, Mark
; TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
; FILE REFERENCE: 11746/461041
; CURRENT APPLICATION NUMBER: US/10/367,594
; CURRENT FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: US 09/680,806
; PRIOR FILING DATE: 2000-10-05
; PRIOR APPLICATION NUMBER: US 09/011,645
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: PCT/US96/13363
; PRIOR FILING DATE: 1996-08-16
; PRIOR APPLICATION NUMBER: US 60/002,490
; PRIOR FILING DATE: 1995-08-18
; PRIOR APPLICATION NUMBER: US 60/002,479
; PRIOR FILING DATE: 1995-08-18
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 88
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-10-367-594-88

Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
```

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | |
Db 1 LLMGTLGIV 9

RESULT 15

US-10-367-654-88
; Sequence 88, Application US/10367654
; Publication No. US2004007172JA1
; GENERAL INFORMATION:

APPLICANT: Rothman, James E.
APPLICANT: Hartl, F. Ulrich
APPLICANT: Hoe, Mee H.
APPLICANT: Houghton, Alan
APPLICANT: Takeuchi, Yoshizumi
APPLICANT: Mayhew, Mark
TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
FILE REFERENCE: 11746/461032
CURRENT APPLICATION NUMBER: US/10/367,654
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: US 10/171,734
PRIOR FILING DATE: 2002-06-13
PRIOR APPLICATION NUMBER: US 09/636,295
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 09/011,645
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: PCT/US96/13363
PRIOR FILING DATE: 1996-08-16
PRIOR APPLICATION NUMBER: US 60/002,490
PRIOR FILING DATE: 1995-08-18
PRIOR APPLICATION NUMBER: US 60/002,479
PRIOR FILING DATE: 1995-08-18
NUMBER OF SEQ ID NOS: 349
SOFTWARE: WordPerfect 8.0 for Windows
SEQ ID NO 88
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: synthetic peptide
US-10-367-654-88

Query Match 100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | |
Db 1 LLMGTLGIV 9

RESULT 16

US-10-367-658-88
; Sequence 88, Application US/10367658
; Publication No. US2004007172JA1
; GENERAL INFORMATION:

APPLICANT: Rothman, James E.
APPLICANT: Hartl, F. Ulrich
APPLICANT: Hoe, Mee H.
APPLICANT: Houghton, Alan
APPLICANT: Takeuchi, Yoshizumi
APPLICANT: Mayhew, Mark
TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
FILE REFERENCE: 11746/461051
CURRENT APPLICATION NUMBER: US/10/367,658
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: US 09/794,529
PRIOR FILING DATE: 2001-02-27
PRIOR APPLICATION NUMBER: US 09/011,645
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: PCT/US96/13363

PRIOR FILING DATE: 1996-08-16

PRIOR APPLICATION NUMBER: US 60/002,490

PRIOR FILING DATE: 1995-08-18

PRIOR APPLICATION NUMBER: US 60/002,479

PRIOR FILING DATE: 1995-08-18

NUMBER OF SEQ ID NOS: 349

SOFTWARE: WordPerfect 8.0 for Windows

SEQ ID NO 88

LENGTH: 9

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: synthetic peptide
US-10-367-658-88

Query Match 100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | |
Db 1 LLMGTLGIV 9

RESULT 17

US-10-367-668-88
; Sequence 88, Application US/10367668
; Publication No. US2004007172JA1
; GENERAL INFORMATION:

APPLICANT: Rothman, James E.
APPLICANT: Hartl, F. Ulrich
APPLICANT: Hoe, Mee H.
APPLICANT: Houghton, Alan
APPLICANT: Takeuchi, Yoshizumi
APPLICANT: Mayhew, Mark
TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
FILE REFERENCE: 11746/461072
CURRENT APPLICATION NUMBER: US/10/367,668
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: US 09/794,517
PRIOR FILING DATE: 2001-02-27
PRIOR APPLICATION NUMBER: US 09/011,645
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: PCT/US96/13363
PRIOR FILING DATE: 1996-08-16
PRIOR APPLICATION NUMBER: US 60/002,490
PRIOR FILING DATE: 1995-08-18
PRIOR APPLICATION NUMBER: US 60/002,479
PRIOR FILING DATE: 1995-08-18
NUMBER OF SEQ ID NOS: 349
SOFTWARE: WordPerfect 8.0 for Windows
SEQ ID NO 88
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: synthetic peptide
US-10-367-668-88

Query Match 100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLMGTLGIV 9
| | | | | | | |
Db 1 LLMGTLGIV 9

RESULT 18

US-10-472-661-4
; Sequence 4, Application US/10472661
; Publication No. US20040106551A1
; GENERAL INFORMATION:

```
APPLICANT: Khleif, Samir N.
APPLICANT: Berzofsky, Jay A.
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS IMMUNOREACTIVE
TITLE OF INVENTION: PEPTIDES
FILE REFERENCE: 14014.0406U2
CURRENT APPLICATION NUMBER: US/10/472.661
PRIOR FILING DATE: 2003-09-22
PRIOR APPLICATION NUMBER: PCT/US02/09261
PRIOR FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: 60/278,520
PRIOR FILING DATE: 2001-03-23
NUMBER OF SEQ ID NOS: 9
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 4
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence; note =
US-10-472-661-4
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 LLMGTLGIV 9
        |||||
Db      1 LLMGTLGIV 9
```

```
RESULT 19
US-10-367-674-88
Sequence 88, Application US/10367674
Publication No. US2004012764A1
GENERAL INFORMATION:
APPLICANT: Rothman, James E.
APPLICANT: Harcl, F. Ulrich
APPLICANT: Hoe, Mee H.
APPLICANT: Houghton, Alan
APPLICANT: Takechi, Yoshizumi
TITLE OF INVENTION: Heat Shock Protein-Based Vaccines and Immunotherapies
FILE REFERENCE: 11746/4610211
CURRENT APPLICATION NUMBER: US/10/367,674
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: US 10/170,738
PRIOR FILING DATE: 2002-06-13
PRIOR APPLICATION NUMBER: US 09/552,868
PRIOR FILING DATE: 2000-04-20
PRIOR APPLICATION NUMBER: US 09/011,645
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: PCT/US96/13363
PRIOR FILING DATE: 1996-08-16
PRIOR APPLICATION NUMBER: US 60/002,490
PRIOR FILING DATE: 1995-08-18
PRIOR APPLICATION NUMBER: US 60/002,479
PRIOR FILING DATE: 1995-08-18
NUMBER OF SEQ ID NOS: 349
SOFTWARE: WordPerfect 8.0 for Windows
SEQ ID NO 88
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: synthetic peptide
US-10-367-674-88
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 LLMGTLGIV 9
```

```
Db      1 LLMGTLGIV 9
        |||||
```

```
RESULT 20
US-10-777-053-543
Sequence 543, Application US/10777053
Publication No. US20040132086A1
GENERAL INFORMATION:
APPLICANT: Simard, John J. L.
APPLICANT: Diamond, David C.
APPLICANT: Qiu, Zhiyong
APPLICANT: Lei, Xiang-Dong
TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPTOPES OF
TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
FILE REFERENCE: MANNK.022C1
CURRENT APPLICATION NUMBER: US/10/777,053
CURRENT FILING DATE: 2004-02-10
PRIOR APPLICATION NUMBER: 10/292,413
PRIOR FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: 60/336,968
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 979
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 543
LENGTH: 9
TYPE: PRT
ORGANISM: Human Papillomavirus
US-10-777-053-543
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 LLMGTLGIV 9
        |||||
Db      1 LLMGTLGIV 9
```

```
RESULT 21
US-10-837-217-543
Sequence 543, Application US/10837217
Publication No. US20040203051A1
GENERAL INFORMATION:
APPLICANT: Simard, John J. L.
APPLICANT: Diamond, David C.
APPLICANT: Qiu, Zhiyong
APPLICANT: Lei, Xiang-Dong
TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPTOPES OF
TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
FILE REFERENCE: MANNK.022C2
CURRENT APPLICATION NUMBER: US/10/837,217
CURRENT FILING DATE: 2004-04-30
PRIOR APPLICATION NUMBER: 10/292,413
PRIOR FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: 60/336,968
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 979
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 543
LENGTH: 9
TYPE: PRT
ORGANISM: Human Papillomavirus
US-10-837-217-543
```

```
Query Match          100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 LLMGTLGIV 9
        |||||
Db      1 LLMGTLGIV 9
```

```
RESULT 22
US-10-815-514-9
; Sequence 9, Application US/10815514
; Publication No. US20040204361A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James
; APPLICANT: Mayhew, Mark
; APPLICANT: Hoe, Mee
; TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
; FILE REFERENCE: 31488
; CURRENT APPLICATION NUMBER: US/10/815,514
; CURRENT FILING DATE: 2004-03-31
; PRIOR APPLICATION NUMBER: US/09/696,872
; PRIOR FILING DATE: 2000-10-26
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 9
; TYPE: PRT
; ORGANISM: papillomavirus
US-10-815-514-9

Query Match      100.0%; Score 42; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTGLGIV 9
        |||||
Db      1 LLMGTGLGIV 9

RESULT 23
US-10-603-062-1
; Sequence 1, Application US/10603062
; Publication No. US20040229809A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
;           Chicz, Roman M.
;           Collins, Edward J.
;           Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
;           PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/603,062
; FILING DATE: 24-Jun-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 1:
```

```
SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-603-062-1

Query Match      100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTGLGIV 9
        |||||
Db      1 LLMGTGLGIV 9

RESULT 24
US-10-877-930-9
; Sequence 9, Application US/10877930
; Publication No. US20040235129A1
; GENERAL INFORMATION:
; APPLICANT: Rothman, James
; APPLICANT: Mayhew, Mark
; APPLICANT: Hoe, Mee
; TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
; FILE REFERENCE: 31488
; CURRENT APPLICATION NUMBER: US/10/877,930
; CURRENT FILING DATE: 2004-06-25
; PRIOR APPLICATION NUMBER: US/09/696,070
; PRIOR FILING DATE: 2000-10-25
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 9
; TYPE: PRT
; ORGANISM: papillomavirus
US-10-877-930-9

Query Match      100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 LLMGTGLGIV 9
        |||||
Db      1 LLMGTGLGIV 9

RESULT 25
US-10-871-138-5
; Sequence 5, Application US/10871138
; Publication No. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; CURRENT FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-871-138-5
```


Query Match 100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
1 LLMGTGIV 9

RESULT 26
US-10-758-970-106
; Sequence 106, Application US/10758970
; Publication No. US20050037086A1
; GENERAL INFORMATION:

APPLICANT: Hedley, Mary Lynne
APPLICANT: Heu, Yung-Yuen
APPLICANT: TYO, Michael
TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
FILE REFERENCE: 08191-012001
CURRENT APPLICATION NUMBER: US/10/758,970
CURRENT FILING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: US/09/715,708A
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: US 60/166,516
PRIOR FILING DATE: 1999-11-19
NUMBER OF SEQ ID NOS: 109
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 106
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-758-970-106

Query Match 100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
1 LLMGTGIV 9

RESULT 27

US-10-484-063-17
; Sequence 17, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:

APPLICANT: SASTRY, K. JAGANNADHA
APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: POLLEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
FILE REFERENCE: UTSC:560US
CURRENT APPLICATION NUMBER: US/10/484,063
CURRENT FILING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: PCT/US02/23198
PRIOR FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,809
PRIOR FILING DATE: 2001-07-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 17
LENGTH: 9
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-484-063-17

Query Match 100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9

DB 1 LLMGTGIV 9
1 LLMGTGIV 9

RESULT 28
US-10-873-594-9
; Sequence 9, Application US/10873594
; Publication No. US20050095667A1
; GENERAL INFORMATION:

APPLICANT: Rochman, James
APPLICANT: Mayhew, Mark
APPLICANT: Hoe, Mee
TITLE OF INVENTION: KDEL RECEPTOR INHIBITORS
FILE REFERENCE: A31488-I-I 065360.0152
CURRENT APPLICATION NUMBER: US/10/873,594
CURRENT FILING DATE: 2004-06-21
PRIOR APPLICATION NUMBER: US/09/800,358
PRIOR FILING DATE: 2001-03-05
PRIOR APPLICATION NUMBER: 09/696,070
PRIOR FILING DATE: 2000-10-25
PRIOR APPLICATION NUMBER: 09/124,671
PRIOR FILING DATE: 1998-07-29
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 9
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-873-594-9

Query Match 100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
1 LLMGTGIV 9

RESULT 29
US-10-751-845-60
; Sequence 60, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:

APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 60
LENGTH: 9
TYPE: PRT
ORGANISM: Human Papilloma virus
US-10-751-845-60

Query Match 100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
1 LLMGTGIV 9

```
RESULT 30
US-10-924-377-16
; Sequence 16, Application US/10924377
; Publication No. US20050181458A1
; GENERAL INFORMATION:
; APPLICANT: Harding, Fiona
; APPLICANT: Mucha, Jeannette Marie
; TITLE OF INVENTION: HPV CD8+ T-Cell Epitopes
; FILE REFERENCE: GC811-20S
; CURRENT APPLICATION NUMBER: US/10/924,377
; CURRENT FILING DATE: 2004-08-23
; PRIOR APPLICATION NUMBER: US 60/500,452
; PRIOR FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 9
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-924-377-16

Query Match          100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 1 LLMGTLGIV 9
```

```
RESULT 31
US-10-776-521B-67
; Sequence 67, Application US/10776521B
; Publication No. US20050202033A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, Jessica
; APPLICANT: Prince-Cohane, Kenya
; APPLICANT: Mehta, Sunil
; APPLICANT: Stusarewicz, Paul
; APPLICANT: Andjelic, Sofija
; APPLICANT: Barber, Brian
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED VACCINES AND
; FILE REFERENCE: 8449-405-999
; CURRENT APPLICATION NUMBER: US/10/776,521B
; CURRENT FILING DATE: 2004-02-12
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
; PRIOR APPLICATION NUMBER: 60/462,469
; PRIOR FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: 60/447,142
; PRIOR FILING DATE: 2003-02-13
; NUMBER OF SEQ ID NOS: 419
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 67
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papilloma Virus
US-10-776-521B-67
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 1 LLMGTLGIV 9
```

RESULT 32

```
US-10-820-067A-67
; Sequence 67, Application US/10820067A
; Publication No. US20050214312A1
; GENERAL INFORMATION:
; APPLICANT: Fletcher, J.
; APPLICANT: Prince-Cohane, K.
; APPLICANT: Mehta, Sunil
; APPLICANT: Stusarewicz, P.
; APPLICANT: Andjelic, S.
; TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED
; FILE REFERENCE: 8449-405-999
; CURRENT APPLICATION NUMBER: US/10/820,067A
; CURRENT FILING DATE: 2004-04-08
; PRIOR APPLICATION NUMBER: 60/462,469
; PRIOR FILING DATE: 2003-04-11
; PRIOR APPLICATION NUMBER: 60/463,746
; PRIOR FILING DATE: 2003-04-18
; PRIOR APPLICATION NUMBER: 60/503,417
; PRIOR FILING DATE: 2003-09-16
; NUMBER OF SEQ ID NOS: 926
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 67
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papilloma Virus
US-10-820-067A-67
```

```
Query Match          100.0%; Score 42; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 1 LLMGTLGIV 9
```

```
RESULT 33
US-09-891-823-47
; Sequence 47, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Wymet, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/09/891,823
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-891-823-47
```

```
Query Match          100.0%; Score 42; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 2 LLMGTLGIV 10
```

RESULT 34
US-10-062-710-229

```
; Sequence 229, Application US/10062710
; Publication No. US20030049253A1
; GENERAL INFORMATION:
; APPLICANT: Li, Frank O.
; APPLICANT: Chu, Yong-Liang
; TITLE OF INVENTION: Polymeric Conjugates for Delivery of
; TITLE OF INVENTION: MHC-Recognized Epitopes
; TITLE OF INVENTION: Via Peptide Vaccines
; FILE REFERENCE: 3781-001-27
; CURRENT APPLICATION NUMBER: US/10/062,710
; PRIOR FILING DATE: 2002-02-05
; PRIOR APPLICATION NUMBER: US 60/310,498
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 232
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 229
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Epstein-Barr Virus
US-10-062-710-229
```

```
Query Match      100.0%; Score 42; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 2 LLMGTLGIV 10
```

```
RESULT 35
US-10-365-908-47
; Sequence 47, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neele, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Minnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; PRIOR FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-47
```

```
Query Match      100.0%; Score 42; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 2 LLMGTLGIV 10
```

```
RESULT 36
US-10-871-138-47
; Sequence 47, Application US/10871138
; Publication No. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neele, John R.
; APPLICANT: Boux, Leslie J.
```

```
; APPLICANT: Minnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; PRIOR FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-871-138-47
```

```
Query Match      100.0%; Score 42; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 2 LLMGTLGIV 10
```

```
RESULT 37
US-10-751-845-107
; Sequence 107, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; PRIOR FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 107
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human Papilloma virus
US-10-751-845-107
```

```
Query Match      100.0%; Score 42; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTLGIV 9
    |||||
Db 2 LLMGTLGIV 9
```

```
RESULT 38
US-10-472-661-7
; Sequence 7, Application US/10472661
; Publication No. US20040106551A1
; GENERAL INFORMATION:
; APPLICANT: Khleif, Samir N.
; APPLICANT: Berzofsky, Jay A.
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS IMMUNOREACTIVE
; TITLE OF INVENTION: PEPTIDES
; FILE REFERENCE: 14014,040602
```

```
/ CURRENT APPLICATION NUMBER: US/10/472,661
/ CURRENT FILING DATE: 2003-09-22
/ PRIOR APPLICATION NUMBER: PCT/US02/09261
/ PRIOR FILING DATE: 2002-03-22
/ PRIOR APPLICATION NUMBER: 60/278,520
/ PRIOR FILING DATE: 2001-03-23
/ NUMBER OF SEQ ID NOS: 9
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 7
/ LENGTH: 11
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence; note =
/ OTHER INFORMATION: synthetic construct
US-10-472-661-7
```

```
Query Match          100.0%; Score 42; DB 4; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.24;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTGIV 9
    |||||
Db 1 LLMGTGIV 9
```

```
RESULT 39
US-09-909-460-108
/ Sequence 108, Application US/09909460
/ Publication No. US20020182258A1
/ GENERAL INFORMATION:
/ APPLICANT: Lunsford, Lynn B.
/ APPLICANT: Putnam, David
/ APPLICANT: Hedley, Mary Lynne
/ TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
/ TITLE OF INVENTION: ACID
/ FILE REFERENCE: 08191/014001
/ CURRENT APPLICATION NUMBER: US/09/909,460
/ CURRENT FILING DATE: 2001-07-18
/ PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
/ PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
/ NUMBER OF SEQ ID NOS: 114
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 108
/ LENGTH: 12
/ TYPE: PRT
/ ORGANISM: Human papilloma virus
US-09-909-460-108
```

```
Query Match          100.0%; Score 42; DB 3; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.26;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTGIV 9
    |||||
Db 1 LLMGTGIV 9
```

```
RESULT 40
US-09-872-836-108
/ Sequence 108, Application US/09872836
/ Publication No. US20040142475A1
/ GENERAL INFORMATION:
/ APPLICANT: Barman, Shikha P.
/ APPLICANT: McKeever, Una
/ APPLICANT: Hedley, Mary Lynne
/ TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
/ FILE REFERENCE: 08191-018001
/ CURRENT APPLICATION NUMBER: US/09/872,836
/ CURRENT FILING DATE: 2001-06-01
/ PRIOR APPLICATION NUMBER: US 60/208,830
/ PRIOR FILING DATE: 2000-06-02
/ NUMBER OF SEQ ID NOS: 120
```

```
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 108
/ LENGTH: 12
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-872-836-108
```

```
Query Match          100.0%; Score 42; DB 3; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.26;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTGIV 9
    |||||
Db 1 LLMGTGIV 9
```

```
RESULT 41
US-10-758-970-108
/ Sequence 108, Application US/10758970
/ Publication No. US20050037086A1
/ GENERAL INFORMATION:
/ APPLICANT: Hedley, Mary Lynne
/ APPLICANT: Heu, Yung-Yueh
/ APPLICANT: Tyo, Michael
/ TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
/ FILE REFERENCE: 08191-012001
/ CURRENT APPLICATION NUMBER: US/10/758,970
/ CURRENT FILING DATE: 2004-01-16
/ PRIOR APPLICATION NUMBER: US/09/715,708A
/ PRIOR FILING DATE: 2000-11-17
/ PRIOR APPLICATION NUMBER: US 60/166,516
/ PRIOR FILING DATE: 1999-11-19
/ NUMBER OF SEQ ID NOS: 109
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 108
/ LENGTH: 12
/ TYPE: PRT
/ ORGANISM: Human papilloma virus
US-10-758-970-108
```

```
Query Match          100.0%; Score 42; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.26;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTGIV 9
    |||||
Db 1 LLMGTGIV 9
```

```
RESULT 42
US-10-751-845-62
/ Sequence 62, Application US/10751845
/ Publication No. US20050100928A1
/ GENERAL INFORMATION:
/ APPLICANT: Hedley, Mary Lynne
/ APPLICANT: Urban, Robert G.
/ APPLICANT: Chicz, Roman M.
/ TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
/ FILE REFERENCE: 08191-013001
/ CURRENT APPLICATION NUMBER: US/10/751,845
/ CURRENT FILING DATE: 2004-01-05
/ PRIOR APPLICATION NUMBER: US/09/664,225
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: US 60/169,846
/ PRIOR FILING DATE: 1999-12-09
/ PRIOR APPLICATION NUMBER: US 60/154,665
/ PRIOR FILING DATE: 1999-09-16
/ NUMBER OF SEQ ID NOS: 163
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 62
/ LENGTH: 12
/ TYPE: PRT
/ ORGANISM: Human Papilloma virus
```

US-10-751-845-62

Query Match 100.0%; Score 42; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.26;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
| | | | |
| | | | |
DB 1 LLMGTLGIV 9

RESULT 43

US-09-759-960-3
; Sequence 3, Application US/09759960
; Patent No. US2001000639A1

GENERAL INFORMATION:

APPLICANT: Urban, Robert G.

APPLICANT: Chic, Roman M.

APPLICANT: Collins, Edward J.

APPLICANT: Hedley, Mary Lynn

TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7

TITLE OF INVENTION: PROTEIN

NUMBER OF SEQUENCES: 33

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Fish & Richardson, P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

COUNTRY: US

ZIP: 02110-2804

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FastSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/759,960

FILING DATE:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/169,425

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Frazer, Janis K.

REGISTRATION NUMBER: 34,819

REFERENCE/DOCKET NUMBER: 08191/004002

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-542-5070

TELEFAX: 617-543-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-09-759-960-3

Query Match 100.0%; Score 42; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.26;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
| | | | |
| | | | |
DB 1 LLMGTLGIV 9

RESULT 44

US-09-909-460-110

Sequence 110, Application US/09909460

Publication No. US20020182258A1

GENERAL INFORMATION:

APPLICANT: Lunsford, Lynn B.

APPLICANT: Putnam, David

APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC

FILE REFERENCE: 08191/014001

CURRENT APPLICATION NUMBER: US/09/909,460

CURRENT FILING DATE: 2001-07-18

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346

PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27

NUMBER OF SEQ ID NOS: 114

SOFTWARE: FastSeq for Windows Version 3.0

SEQ ID NO 110

LENGTH: 13

TYPE: PRT

ORGANISM: Human papilloma virus

US-09-909-460-110

Query Match 100.0%; Score 42; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.28;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
| | | | |
| | | | |
DB 1 LLMGTLGIV 9

RESULT 45

US-09-872-836-110

Sequence 110, Application US/09872836

Publication No. US20040142475A1

GENERAL INFORMATION:

APPLICANT: Barman, Shikha P.

APPLICANT: McKeever, Una

APPLICANT: Hedley, Mary Lynn

TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS

FILE REFERENCE: 08191-018001

CURRENT APPLICATION NUMBER: US/09/872,836

CURRENT FILING DATE: 2001-06-01

PRIOR APPLICATION NUMBER: US 60/208,830

PRIOR FILING DATE: 2000-06-02

NUMBER OF SEQ ID NOS: 120

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 110

LENGTH: 13

TYPE: PRT

ORGANISM: Homo sapiens

US-09-872-836-110

Query Match 100.0%; Score 42; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.28;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
| | | | |
| | | | |
DB 1 LLMGTLGIV 9

RESULT 46

US-10-603-062-3

Sequence 3, Application US/10603062

Publication No. US20040229809A1

GENERAL INFORMATION:

APPLICANT: Urban, Robert G.

APPLICANT: Chic, Roman M.

APPLICANT: Collins, Edward J.

APPLICANT: Hedley, Mary Lynn

TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7

NUMBER OF SEQUENCES: 33

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Fish & Richardson, P.C.

STREET: 225 Franklin Street

CITY: Boston

STATE: MA

```

;
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/603,062
; FILING DATE: 24-Jun-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-10-603-062-3
```

```
Query Match          100.0%; Score 42; DB 5; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.28;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTGLIV 9
   |||||
Db 1 LLMGTGLIV 9
```

```

RESULT 47
US-10-648-547-75
; Sequence 75; Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 75
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-75
```

```
Query Match          100.0%; Score 42; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTGLIV 9
   |||||
Db 5 LLMGTGLIV 13
```

```

RESULT 48
US-10-648-547-79
; Sequence 79; Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 79
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-79
```

```
Query Match          100.0%; Score 42; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTGLIV 9
   |||||
Db 7 LLMGTGLIV 15
```

```

RESULT 49
US-10-648-547-84
; Sequence 84; Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 84
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-84
```

```
Query Match          100.0%; Score 42; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTGLIV 9
   |||||
Db 3 LLMGTGLIV 11
```

```

RESULT 50
US-10-648-547-95
; Sequence 95; Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
```

; CURRENT APPLICATION NUMBER: US/10/648,547
; CURRENT FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 95
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
; US-10-648-547-95

Query Match 100.0%; Score 42; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
Db 6 LLMGTGIV 14

Search completed: May 5, 2006, 07:43:11
Job time : 81.2 secs

THIS PAGE LEFT BLANK

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 07:32:07 ; Search time 18.4 Seconds
(without alignments)
22.639 Million cell updates/sec

Title: US-08-170-344-18

Perfect score: 42
Sequence: 1 LLMGTLCIV 9

Scoring table: BIOSUM62
Gapop 10.0, Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 1000 summaries

Database :

1: /SIDS5/ptodata/1/pubppaa/US08_NEW_PUB.pep1.*
2: /SIDS5/ptodata/1/pubppaa/US06_NEW_PUB.pep.*
3: /SIDS5/ptodata/1/pubppaa/US07_NEW_PUB.pep.*
4: /SIDS5/ptodata/1/pubppaa/US08_NEW_PUB.pep.*
5: /SIDS5/ptodata/1/pubppaa/US09_NEW_PUB.pep.*
6: /SIDS5/ptodata/1/pubppaa/US09_NEW_PUB.pep1.*
7: /SIDS5/ptodata/1/pubppaa/US10_NEW_PUB.pep1.*
8: /SIDS5/ptodata/1/pubppaa/US10_NEW_PUB.pep.*
9: /SIDS5/ptodata/1/pubppaa/US11_NEW_PUB.pep1.*
10: /SIDS5/ptodata/1/pubppaa/US11_NEW_PUB.pep.*
11: /SIDS5/ptodata/1/pubppaa/US11_NEW_PUB.pep1.*
12: /SIDS5/ptodata/1/pubppaa/US60_NEW_PUB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	100.0	15	9	US-10-530-061-1713
2	42	100.0	15	9	US-10-530-061-1714
3	42	100.0	15	9	US-10-530-061-1715
4	42	100.0	98	8	US-10-511-814-8
5	42	100.0	98	8	US-10-511-814-11
6	42	100.0	98	9	US-10-530-253-14
7	42	100.0	98	11	US-11-179-478-4
8	42	100.0	248	9	US-10-530-253-1
9	42	100.0	248	9	US-10-530-253-3
10	42	100.0	248	9	US-10-530-253-5
11	42	100.0	248	9	US-10-530-253-7
12	42	100.0	248	9	US-10-530-253-9
13	42	100.0	248	9	US-10-530-253-11
14	42	100.0	256	11	US-11-192-923A-2
15	38	99.5	9	9	US-10-530-253-30
16	34	81.0	15	9	US-10-530-061-1722
17	34	81.0	15	9	US-10-530-061-1723
18	34	81.0	98	9	US-10-530-253-28
19	33	78.6	15	9	US-10-530-061-1725
20	33	78.6	15	9	US-10-530-061-1726
21	33	78.6	15	9	US-10-530-061-1727

22	33	78.6	97	9	US-10-530-253-29	Sequence 29, Appl
23	33	78.6	179	11	US-11-106-399-10	Sequence 10, Appl
24	32	76.2	169	11	US-11-087-099-7291	Sequence 7391, Ap
25	32	76.2	313	11	US-11-188-298-9309	Sequence 9309, Ap
26	32	76.2	340	11	US-11-203-251A-101	Sequence 101, Appl
27	32	76.2	417	11	US-11-188-298-7288	Sequence 7288, Ap
28	32	76.2	473	11	US-11-188-298-1021	Sequence 1021, Ap
29	32	76.2	473	11	US-11-188-298-4129	Sequence 4129, Ap
30	32	76.2	473	11	US-11-045-004-854	Sequence 854, App
31	32	76.2	473	11	US-11-188-298-11785	Sequence 11785, A
32	32	76.2	637	11	US-11-188-298-10117	Sequence 10117, A
33	32	76.2	197	11	US-11-188-298-13016	Sequence 13016, A
34	31	73.8	253	11	US-11-045-004-2568	Sequence 2568, Ap
35	31	73.8	327	11	US-11-188-298-12413	Sequence 12413, A
36	31	73.8	353	11	US-11-045-004-437	Sequence 437, App
37	31	73.8	423	11	US-11-072-512-239	Sequence 2399, Ap
38	31	73.8	422	11	US-11-188-298-5239	Sequence 5239, Ap
39	31	73.8	625	11	US-11-188-298-6306	Sequence 6306, Ap
40	30	71.4	15	9	US-10-530-061-1721	Sequence 1721, Ap
41	30	71.4	104	9	US-10-530-253-40	Sequence 40, Appl
42	30	71.4	205	11	US-11-079-463-6282	Sequence 6282, Ap
43	30	71.4	232	9	US-10-506-454-1358	Sequence 1358, Ap
44	30	71.4	370	11	US-11-188-298-11179	Sequence 11179, A
45	30	71.4	371	11	US-11-087-099-5578	Sequence 5578, Ap
46	30	71.4	371	11	US-11-188-298-16133	Sequence 16133, A
47	30	71.4	437	11	US-11-079-463-8893	Sequence 8893, Ap
48	30	71.4	540	11	US-11-079-463-6055	Sequence 6055, Ap
49	30	71.4	554	11	US-11-188-298-17174	Sequence 17174, A
50	30	71.4	651	11	US-11-188-298-15243	Sequence 15243, A
51	30	71.4	651	11	US-11-188-298-20801	Sequence 20801, A
52	30	71.4	1304	9	US-10-821-234-1648	Sequence 1648, Ap
53	30	71.4	1304	11	US-11-232-440-6	Sequence 6, Appl
54	30	71.4	1319	11	US-11-232-440-7	Sequence 7, Appl
55	30	71.4	3389	9	US-10-204-252-10	Sequence 10, Appl
56	30	71.4	3391	9	US-10-204-252-6	Sequence 6, Appl
57	30	71.4	3391	9	US-10-204-252-12	Sequence 12, Appl
58	30	71.4	3391	9	US-10-204-252-14	Sequence 14, Appl
59	30	71.4	3391	9	US-10-204-252-16	Sequence 16, Appl
60	30	71.4	3391	9	US-10-204-252-18	Sequence 18, Appl
61	30	71.4	3391	9	US-10-204-252-20	Sequence 20, Appl
62	30	71.4	3402	9	US-10-204-252-22	Sequence 22, Appl
63	29	69.0	15	9	US-10-530-061-1747	Sequence 1747, Ap
64	29	69.0	15	9	US-10-530-061-1748	Sequence 1748, Ap
65	29	69.0	98	9	US-10-530-253-36	Sequence 36, Appl
66	29	69.0	147	11	US-11-096-5688-2259	Sequence 2259, Ap
67	29	69.0	169	11	US-11-096-5688-11654	Sequence 11654, A
68	29	69.0	175	11	US-11-096-5688-17560	Sequence 17560, A
69	29	69.0	175	11	US-11-045-004-2428	Sequence 2428, Ap
70	29	69.0	193	11	US-11-087-099-7049	Sequence 7049, Ap
71	29	69.0	193	11	US-11-188-298-6451	Sequence 6451, Ap
72	29	69.0	201	11	US-11-096-5688-2258	Sequence 2258, Ap
73	29	69.0	216	7	US-09-978-360A-671	Sequence 671, Appl
74	29	69.0	221	9	US-10-714-887-188	Sequence 188, App
75	29	69.0	223	8	US-10-511-937-2414	Sequence 2414, Ap
76	29	69.0	257	11	US-11-096-5688-2257	Sequence 2257, Ap
77	29	69.0	262	11	US-11-079-463-6379	Sequence 6379, Ap
78	29	69.0	297	11	US-11-096-5688-17559	Sequence 17559, A
79	29	69.0	307	11	US-11-079-463-1300	Sequence 6300, Ap
80	29	69.0	327	9	US-10-467-962B-107	Sequence 107, Appl
81	29	69.0	336	11	US-11-087-099-9682	Sequence 9682, Ap
82	29	69.0	336	11	US-11-188-298-8971	Sequence 8971, Ap
83	29	69.0	336	11	US-11-188-298-13282	Sequence 13282, A
84	29	69.0	342	11	US-11-188-298-18747	Sequence 18747, A
85	29	69.0	345	11	US-11-087-099-1996	Sequence 1996, Ap
86	29	69.0	345	11	US-11-188-298-1976	Sequence 1976, Ap
87	29	69.0	345	11	US-11-188-298-7045	Sequence 7045, Ap
88	29	69.0	355	11	US-11-188-298-15361	Sequence 5361, Ap
89	29	69.0	371	11	US-11-188-298-5736	Sequence 5736, Ap
90	29	69.0	373	11	US-11-188-298-13580	Sequence 13580, A
91	29	69.0	403	8	US-10-505-928-203	Sequence 203, Appl
92	29	69.0	403	11	US-11-169-041-185	Sequence 185, Appl
93	29	69.0	423	11	US-11-079-463-9217	Sequence 9217, Ap
94	29	69.0	429	11	US-11-047-883-12	Sequence 12, Appl
			430	11	US-11-042-814-2	Sequence 2, Appl

95	29	69.0	431.1	11	US-11-045-004-2639	Sequence 2639, App
96	29	69.0	436.1	11	US-11-042-814-4	Sequence 4, Appl1
97	29	69.0	458.1	11	US-11-079-463-8027	Sequence 8027, App
98	29	69.0	464.1	11	US-11-188-298-6123	Sequence 6123, App
99	29	69.0	464.1	11	US-11-188-298-17702	Sequence 17702, A
100	29	69.0	468.1	11	US-11-188-298-5900	Sequence 5900, App
101	29	69.0	468.1	11	US-11-188-298-8539	Sequence 8539, App
102	29	69.0	472.1	11	US-11-188-298-1804	Sequence 1804, App
103	29	69.0	472.1	11	US-11-188-298-7009	Sequence 7009, App
104	29	69.0	472.1	11	US-11-188-298-7690	Sequence 7690, App
105	29	69.0	472.1	11	US-11-188-298-9346	Sequence 9346, App
106	29	69.0	472.1	11	US-11-188-298-15363	Sequence 15363, A
107	29	69.0	476.1	11	US-11-087-099-3599	Sequence 3599, App
108	29	69.0	476.1	11	US-11-087-099-8740	Sequence 8740, App
109	29	69.0	486.1	11	US-11-000-463-273	Sequence 273, App
110	29	69.0	507.1	11	US-11-188-298-1536	Sequence 1536, App
111	29	69.0	515.1	11	US-11-079-463-9903	Sequence 9903, App
112	29	69.0	515.1	11	US-11-188-298-21436	Sequence 21436, A
113	29	69.0	530.9	9	US-10-493-909-85	Sequence 85, Appl1
114	29	69.0	533.1	11	US-11-214-199-63	Sequence 63, Appl1
115	29	69.0	546.1	11	US-11-096-568A-27860	Sequence 27860, A
116	29	69.0	550.1	11	US-11-096-568A-27859	Sequence 27859, A
117	29	69.0	554.1	11	US-11-096-568A-27858	Sequence 27858, A
118	29	69.0	568.1	11	US-11-188-298-10968	Sequence 10968, A
119	29	69.0	585.1	11	US-11-098-686-11088	Sequence 11088, A
120	29	69.0	617.1	11	US-11-188-298-18015	Sequence 18015, A
121	29	69.0	674.9	9	US-10-467-657-6812	Sequence 6812, App
122	29	69.0	680.1	9	US-10-915-002-190	Sequence 190, App
123	29	69.0	696.1	11	US-11-080-991-46	Sequence 46, Appl1
124	29	69.0	708.1	11	US-11-079-463-6575	Sequence 6575, App
125	29	69.0	737.1	11	US-11-188-298-5994	Sequence 5994, App
126	29	69.0	773.1	11	US-11-188-298-19352	Sequence 19352, A
127	29	69.0	779.1	11	US-11-186-284-151	Sequence 151, App
128	29	69.0	787.1	11	US-11-188-298-20334	Sequence 20334, A
129	29	69.0	800.1	11	US-11-188-298-2496	Sequence 2496, App
130	29	69.0	806.1	11	US-11-188-298-11019	Sequence 11019, A
131	29	69.0	806.1	11	US-11-188-298-18451	Sequence 18451, A
132	29	69.0	831.1	11	US-11-188-298-16441	Sequence 16441, A
133	29	69.0	836.9	9	US-10-921-793-84	Sequence 84, Appl1
134	29	69.0	836.9	9	US-10-931-198-84	Sequence 84, Appl1
135	29	69.0	836.9	9	US-10-942-042-84	Sequence 84, Appl1
136	29	69.0	836.9	11	US-11-186-284-149	Sequence 149, App
137	29	69.0	836.9	11	US-11-183-261-53	Sequence 53, Appl1
138	29	69.0	860.1	11	US-11-188-298-3098	Sequence 3098, App
139	29	69.0	860.1	11	US-11-188-298-11604	Sequence 11604, A
140	29	69.0	1033.1	11	US-11-037-243-75	Sequence 75, Appl1
141	29	69.0	1036.9	9	US-10-494-026A-2	Sequence 2, Appl1
142	28	66.7	15.9	9	US-10-530-061-1732	Sequence 1732, App
143	28	66.7	15.9	9	US-10-530-061-1733	Sequence 1733, App
144	28	66.7	15.9	9	US-10-530-061-1734	Sequence 1734, App
145	28	66.7	32.9	9	US-10-895-064-2806	Sequence 2806, App
146	28	66.7	32.11	11	US-11-129-741-2806	Sequence 2806, App
147	28	66.7	65.11	11	US-11-329-769-164	Sequence 164, App
148	28	66.7	96.9	9	US-10-511-538-245	Sequence 245, App
149	28	66.7	99.9	9	US-10-530-253-34	Sequence 34, Appl1
150	28	66.7	106.11	11	US-11-188-298-969	Sequence 969, App
151	28	66.7	135.11	11	US-11-096-568A-16154	Sequence 16154, A
152	28	66.7	141.11	11	US-11-004-399-3316	Sequence 3316, App
153	28	66.7	150.11	11	US-11-096-568A-24991	Sequence 24991, A
154	28	66.7	153.11	11	US-11-188-298-19085	Sequence 19085, A
155	28	66.7	176.11	11	US-11-096-568A-24990	Sequence 24990, A
156	28	66.7	180.9	9	US-10-467-657-3386	Sequence 3386, App
157	28	66.7	180.11	11	US-11-172-740-1866	Sequence 1866, App
158	28	66.7	226.11	11	US-11-096-568A-24989	Sequence 24989, A
159	28	66.7	226.11	11	US-11-082-389-406	Sequence 406, App
160	28	66.7	232.9	9	US-10-793-626-3642	Sequence 2642, App
161	28	66.7	239.11	11	US-11-096-568A-16153	Sequence 16153, A
162	28	66.7	254.11	11	US-11-087-099-1210	Sequence 1210, App
163	28	66.7	254.11	11	US-11-087-099-12382	Sequence 12382, A
164	28	66.7	258.9	9	US-11-087-099-3254	Sequence 3254, App
165	28	66.7	288.9	9	US-10-467-657-2234	Sequence 2234, App
166	28	66.7	298.11	11	US-11-074-176-6	Sequence 6, Appl1
167	28	66.7	299.11	11	US-11-079-463-10339	Sequence 10339, A
168	28	66.7	304.9	9	US-10-793-626-1652	Sequence 1652, App
169	28	66.7	320.11	11	US-11-072-512-2641	Sequence 2641, App
170	28	66.7	330.11	11	US-11-188-298-2011	Sequence 2011, App
171	28	66.7	331.11	11	US-11-188-298-14045	Sequence 14045, A
172	28	66.7	335.9	9	US-10-506-454-1214	Sequence 1214, App
173	28	66.7	335.11	11	US-11-188-298-13682	Sequence 13682, A
174	28	66.7	344.11	11	US-11-087-099-8295	Sequence 8295, App
175	28	66.7	344.11	11	US-11-096-568A-12954	Sequence 12954, App
176	28	66.7	344.11	11	US-11-188-298-18658	Sequence 18658, A
177	28	66.7	351.11	11	US-11-096-568A-12953	Sequence 12953, A
178	28	66.7	353.11	11	US-11-079-463-5707	Sequence 5707, App
179	28	66.7	356.11	11	US-11-188-298-15031	Sequence 15031, A
180	28	66.7	357.11	11	US-11-188-298-14848	Sequence 14848, A
181	28	66.7	357.11	11	US-11-045-004-1742	Sequence 1742, App
182	28	66.7	360.9	9	US-10-995-561-547	Sequence 547, App
183	28	66.7	370.11	11	US-11-045-004-56	Sequence 56, Appl1
184	28	66.7	381.9	9	US-10-641-678-74	Sequence 74, Appl1
185	28	66.7	387.11	11	US-11-092-140-17	Sequence 17, Appl1
186	28	66.7	404.11	11	US-11-096-568A-6857	Sequence 6857, App
187	28	66.7	418.11	11	US-11-096-568A-28156	Sequence 28156, App
188	28	66.7	422.11	11	US-11-188-298-7576	Sequence 7576, App
189	28	66.7	432.11	11	US-11-087-099-10883	Sequence 10883, A
190	28	66.7	441.11	11	US-11-188-298-6457	Sequence 6457, App
191	28	66.7	451.11	11	US-11-096-568A-6856	Sequence 6856, App
192	28	66.7	451.11	11	US-11-045-004-2398	Sequence 2398, App
193	28	66.7	452.11	11	US-11-188-298-5405	Sequence 5405, App
194	28	66.7	453.11	11	US-11-096-568A-6855	Sequence 6855, App
195	28	66.7	455.9	9	US-10-467-657-5828	Sequence 5828, App
196	28	66.7	456.11	11	US-11-096-568A-28125	Sequence 28125, A
197	28	66.7	458.11	11	US-11-087-099-9884	Sequence 9884, App
198	28	66.7	458.11	11	US-11-188-298-9133	Sequence 9133, App
199	28	66.7	463.11	11	US-11-087-099-7347	Sequence 7347, App
200	28	66.7	463.11	11	US-11-188-298-6739	Sequence 6739, App
201	28	66.7	466.11	11	US-11-188-298-19413	Sequence 19413, A
202	28	66.7	473.11	11	US-11-188-298-2143	Sequence 2143, App
203	28	66.7	484.9	9	US-10-467-657-6816	Sequence 6816, App
204	28	66.7	488.11	11	US-11-188-298-2834	Sequence 2834, App
205	28	66.7	498.11	11	US-11-079-463-6018	Sequence 6018, App
206	28	66.7	506.11	11	US-11-188-298-1959	Sequence 1959, App
207	28	66.7	506.11	11	US-11-188-298-13842	Sequence 13842, A
208	28	66.7	510.11	11	US-11-188-298-2046	Sequence 2046, App
209	28	66.7	527.11	11	US-11-188-298-3488	Sequence 3488, App
210	28	66.7	527.11	11	US-11-188-298-12276	Sequence 12276, A
211	28	66.7	530.11	11	US-11-188-298-5666	Sequence 5666, App
212	28	66.7	534.11	11	US-11-188-298-17731	Sequence 17731, App
213	28	66.7	545.11	11	US-11-096-568A-28124	Sequence 28124, A
214	28	66.7	548.11	11	US-11-045-004-1058	Sequence 1058, App
215	28	66.7	559.11	11	US-11-188-298-1953	Sequence 1953, App
216	28	66.7	564.9	9	US-10-485-517-253	Sequence 253, App
217	28	66.7	564.9	9	US-10-485-517-290	Sequence 290, App
218	28	66.7	624.11	11	US-11-188-298-1475	Sequence 1475, A
219	28	66.7	628.11	11	US-11-082-389-402	Sequence 402, App
220	28	66.7	628.11	11	US-11-188-298-4635	Sequence 4635, App
221	28	66.7	628.11	11	US-11-045-004-807	Sequence 807, App
222	28	66.7	659.11	11	US-11-096-568A-28540	Sequence 28540, A
223	28	66.7	757.9	9	US-10-915-002-226	Sequence 226, App
224	28	66.7	757.9	9	US-10-915-002-261	Sequence 261, App
225	28	66.7	777.9	9	US-10-645-441-3	Sequence 3, Appl1
226	28	66.7	841.9	9	US-10-725-475-5	Sequence 5, Appl1
227	28	66.7	841.11	11	US-11-050-804-2	Sequence 2, Appl1
228	28	66.7	862.11	11	US-11-096-568A-28539	Sequence 28539, A
229	28	66.7	897.11	11	US-11-087-099-8319	Sequence 8319, App
230	28	66.7	955.11	11	US-11-096-568A-28538	Sequence 28538, A
231	28	66.7	1021.11	11	US-11-186-298-14154	Sequence 14154, A
232	28	66.7	1027.11	11	US-11-079-463-8899	Sequence 8899, App
233	28	66.7	1046.9	9	US-10-392-234A-16	Sequence 16, Appl1
234	28	66.7	1089.11	11	US-11-098-666-10150	Sequence 10150, A
235	28	66.7	1783.11	11	US-11-126-313-38	Sequence 38, Appl1
236	28	66.7	19.11	11	US-11-242-294-61	Sequence 61, Appl1
237	27	64.3	19.11	11	US-11-096-568A-8675	Sequence 8675, App
238	27	64.3	76.9	9	US-10-475-075-795	Sequence 795, App
239	27	64.3	85.9	9	US-10-506-454-1345	Sequence 1345, App
240	27	64.3	87.11	11	US-11-000-463-814	Sequence 814, App

241	27	64.3	93	9	US-10-537-002-15	Sequence 15, Appl	314	27	64.3	316	11	US-11-096-568A-20015	Sequence 20015, A
242	27	64.3	93	9	US-10-194-487-244	Sequence 244, App	315	27	64.3	327	9	US-10-821-234-1666	Sequence 1666, Ap
243	27	64.3	93	9	US-10-195-883-244	Sequence 244, App	316	27	64.3	329	11	US-11-096-568A-27521	Sequence 27521, A
244	27	64.3	93	9	US-10-195-888-244	Sequence 244, App	317	27	64.3	339	11	US-11-188-298-312	Sequence 312, App
245	27	64.3	93	9	US-10-195-889-244	Sequence 244, App	318	27	64.3	332	11	US-11-242-294-62	Sequence 62, Appl
246	27	64.3	95	9	US-10-506-454-473	Sequence 473, App	319	27	64.3	332	11	US-11-096-568A-20285	Sequence 20285, A
247	27	64.3	110	11	US-11-188-298-20004	Sequence 20004, A	320	27	64.3	334	11	US-11-087-099-4055	Sequence 4055, Ap
248	27	64.3	117	9	US-10-467-657-1270	Sequence 1270, Ap	321	27	64.3	334	11	US-11-188-298-12554	Sequence 12554, A
249	27	64.3	119	9	US-10-467-657-1270	Sequence 1270, Ap	322	27	64.3	336	11	US-11-188-298-17094	Sequence 17094, A
250	27	64.3	137	11	US-11-000-463-342	Sequence 342, App	323	27	64.3	338	11	US-11-096-568A-3399	Sequence 3399, A
251	27	64.3	139	11	US-11-045-004-278	Sequence 278, App	324	27	64.3	338	11	US-11-096-568A-27520	Sequence 27520, A
252	27	64.3	169	11	US-11-096-568A-24880	Sequence 24880, A	325	27	64.3	339	11	US-11-096-568A-3398	Sequence 3398, Ap
253	27	64.3	173	11	US-11-096-568A-23468	Sequence 23468, A	326	27	64.3	351	11	US-11-096-568A-3398	Sequence 3398, Ap
254	27	64.3	173	11	US-11-018-868-6	Sequence 6, Appl	327	27	64.3	352	11	US-11-045-004-2144	Sequence 2144, Ap
255	27	64.3	173	11	US-11-018-868-46	Sequence 46, Appl	328	27	64.3	352	11	US-11-096-568A-7995	Sequence 7995, Ap
256	27	64.3	173	11	US-11-096-568A-24879	Sequence 24879, A	329	27	64.3	353	9	US-10-506-454-38	Sequence 38, Appl
257	27	64.3	181	11	US-11-096-568A-22040	Sequence 22040, A	330	27	64.3	358	11	US-11-096-568A-27213	Sequence 27213, A
258	27	64.3	186	11	US-11-079-463-10413	Sequence 10413, A	331	27	64.3	360	11	US-11-096-568A-27212	Sequence 27212, A
259	27	64.3	191	9	US-10-793-626-638	Sequence 638, App	332	27	64.3	367	11	US-11-096-568A-22840	Sequence 22840, A
260	27	64.3	191	11	US-11-045-004-62	Sequence 62, Appl	333	27	64.3	368	11	US-11-096-568A-28936	Sequence 28936, A
261	27	64.3	193	11	US-11-096-568A-22039	Sequence 22039, A	334	27	64.3	379	11	US-11-096-568A-8907	Sequence 8907, Ap
262	27	64.3	193	11	US-11-096-568A-24647	Sequence 24647, A	335	27	64.3	379	11	US-11-096-568A-8906	Sequence 8906, Ap
263	27	64.3	195	11	US-11-087-099-3640	Sequence 3640, Ap	336	27	64.3	379	11	US-11-096-568A-8907	Sequence 8907, Ap
264	27	64.3	201	9	US-10-194-487-108	Sequence 108, App	337	27	64.3	379	11	US-11-096-568A-27519	Sequence 27519, A
265	27	64.3	201	9	US-10-195-883-108	Sequence 108, App	338	27	64.3	379	11	US-11-096-568A-8907	Sequence 8907, Ap
266	27	64.3	201	9	US-10-195-888-108	Sequence 108, App	339	27	64.3	379	11	US-11-096-568A-27519	Sequence 27519, A
267	27	64.3	201	9	US-10-195-889-108	Sequence 108, App	340	27	64.3	382	11	US-11-188-298-8677	Sequence 8677, Ap
268	27	64.3	201	9	US-10-216-151A-477	Sequence 477, App	341	27	64.3	382	11	US-11-096-568A-22839	Sequence 22839, A
269	27	64.3	208	9	US-10-131-826A-510	Sequence 510, App	342	27	64.3	384	11	US-11-096-568A-15291	Sequence 15291, A
270	27	64.3	208	9	US-10-973-115B-510	Sequence 510, App	343	27	64.3	385	11	US-11-096-568A-8905	Sequence 8905, Ap
271	27	64.3	208	9	US-10-986-405-261	Sequence 261, App	344	27	64.3	385	11	US-11-096-568A-27211	Sequence 27211, A
272	27	64.3	208	9	US-10-137-873A-510	Sequence 510, App	345	27	64.3	387	11	US-11-096-568A-20283	Sequence 20283, A
273	27	64.3	208	9	US-10-152-370-510	Sequence 510, App	346	27	64.3	398	11	US-11-188-298-20681	Sequence 20681, A
274	27	64.3	208	11	US-11-280-153-510	Sequence 510, App	347	27	64.3	400	11	US-11-087-099-7949	Sequence 7949, Ap
275	27	64.3	208	11	US-11-264-096-732	Sequence 732, App	348	27	64.3	401	11	US-11-072-175-224	Sequence 224, App
276	27	64.3	208	11	US-11-264-096-733	Sequence 733, App	349	27	64.3	401	11	US-11-079-463-6652	Sequence 6652, Ap
277	27	64.3	208	11	US-11-264-096-734	Sequence 734, App	350	27	64.3	402	11	US-11-096-568A-25398	Sequence 25398, A
278	27	64.3	208	11	US-11-264-096-735	Sequence 735, App	351	27	64.3	407	11	US-11-188-298-22438	Sequence 22438, A
279	27	64.3	208	11	US-11-264-096-2245	Sequence 2245, App	352	27	64.3	408	11	US-11-098-686-10559	Sequence 10559, A
280	27	64.3	219	11	US-11-096-568A-23467	Sequence 23467, A	353	27	64.3	408	11	US-11-096-568A-18440	Sequence 18440, A
281	27	64.3	223	11	US-11-096-568A-20017	Sequence 20017, A	354	27	64.3	411	11	US-11-188-298-10886	Sequence 10886, A
282	27	64.3	225	11	US-11-087-099-6421	Sequence 6421, Ap	355	27	64.3	412	11	US-11-055-822-1086	Sequence 1086, Ap
283	27	64.3	227	11	US-11-096-568A-20016	Sequence 20016, A	356	27	64.3	412	11	US-11-096-568A-18439	Sequence 18439, A
284	27	64.3	231	9	US-10-884-730-367	Sequence 367, App	357	27	64.3	412	11	US-11-188-298-5513	Sequence 5513, Ap
285	27	64.3	231	9	US-10-884-730-368	Sequence 368, App	358	27	64.3	412	11	US-11-188-298-21261	Sequence 21261, A
286	27	64.3	231	9	US-10-884-730-369	Sequence 369, App	359	27	64.3	417	9	US-10-821-234-1536	Sequence 1536, Ap
287	27	64.3	232	9	US-10-884-730-363	Sequence 363, App	360	27	64.3	417	11	US-11-096-568A-18438	Sequence 18438, A
288	27	64.3	232	9	US-10-884-730-364	Sequence 364, App	361	27	64.3	419	11	US-11-096-568A-28934	Sequence 28934, A
289	27	64.3	232	9	US-10-884-730-365	Sequence 365, App	362	27	64.3	422	11	US-11-096-568A-8904	Sequence 8904, Ap
290	27	64.3	232	9	US-10-884-730-366	Sequence 366, App	363	27	64.3	429	11	US-11-050-857-637	Sequence 637, App
291	27	64.3	232	11	US-11-188-298-13645	Sequence 13645, A	364	27	64.3	429	11	US-11-051-120-1317	Sequence 1317, Ap
292	27	64.3	237	11	US-11-188-298-17423	Sequence 17423, A	365	27	64.3	434	11	US-11-188-298-21109	Sequence 21109, A
293	27	64.3	239	11	US-11-188-298-22516	Sequence 22516, A	366	27	64.3	434	11	US-11-050-454-552	Sequence 552, App
294	27	64.3	243	11	US-11-096-568A-24644	Sequence 24644, A	367	27	64.3	434	11	US-11-050-457-635	Sequence 635, App
295	27	64.3	244	11	US-11-096-568A-11086	Sequence 11086, A	368	27	64.3	434	11	US-11-051-120-1315	Sequence 1315, Ap
296	27	64.3	244	11	US-11-096-568A-23466	Sequence 23466, A	369	27	64.3	440	11	US-11-098-686-10923	Sequence 10923, A
297	27	64.3	248	11	US-11-188-298-6785	Sequence 6785, App	370	27	64.3	440	11	US-11-087-099-11790	Sequence 11790, A
298	27	64.3	248	11	US-11-188-298-15515	Sequence 15515, A	371	27	64.3	441	11	US-11-087-099-4562	Sequence 4562, App
299	27	64.3	250	11	US-11-188-298-13254	Sequence 13254, A	372	27	64.3	446	11	US-11-050-857-633	Sequence 633, App
300	27	64.3	260	11	US-11-172-740-2242	Sequence 2242, App	373	27	64.3	446	11	US-11-051-120-1430	Sequence 1430, Ap
301	27	64.3	266	11	US-11-045-004-1034	Sequence 1034, Ap	374	27	64.3	447	11	US-11-188-298-7951	Sequence 7951, Ap
302	27	64.3	267	9	US-10-627-952-20	Sequence 20, Appl	375	27	64.3	451	11	US-11-188-298-6556	Sequence 6556, Ap
303	27	64.3	267	9	US-10-329-258-25	Sequence 25, Appl	376	27	64.3	454	11	US-11-050-457-636	Sequence 636, App
304	27	64.3	270	11	US-11-087-099-1954	Sequence 1954, Ap	377	27	64.3	454	11	US-11-051-120-1316	Sequence 1316, App
305	27	64.3	270	11	US-11-096-568A-22038	Sequence 22038, A	378	27	64.3	457	11	US-11-087-099-10361	Sequence 10361, A
306	27	64.3	277	11	US-11-188-298-3162	Sequence 3162, App	379	27	64.3	457	11	US-11-188-298-3210	Sequence 3210, Ap
307	27	64.3	283	11	US-11-079-463-8169	Sequence 8169, App	380	27	64.3	458	11	US-11-087-099-2722	Sequence 2722, App
308	27	64.3	290	11	US-11-087-099-10861	Sequence 10861, A	381	27	64.3	458	11	US-11-087-099-6587	Sequence 6587, Ap
309	27	64.3	295	11	US-11-079-463-6257	Sequence 6257, App	382	27	64.3	464	11	US-11-050-857-634	Sequence 634, App
310	27	64.3	301	11	US-11-079-463-6727	Sequence 6727, App	383	27	64.3	464	11	US-11-051-120-1314	Sequence 1314, Ap
311	27	64.3	304	11	US-11-098-686-11004	Sequence 11004, A	384	27	64.3	466	11	US-11-096-568A-25397	Sequence 25397, A
312	27	64.3	313	11	US-11-188-298-13663	Sequence 13663, A	385	27	64.3	469	9	US-10-467-657-2978	Sequence 2978, Ap
313	27	64.3	316	11	US-11-096-568A-3300	Sequence 3300, Ap	386	27	64.3	472	9	US-10-467-657-6774	Sequence 6774, Ap

387	27	64.3	477	11	US-11-188-298-11308	Sequence 11308, A	460	26	61.9	153	11	US-11-172-740-1862	Sequence 1862, Ap
388	27	64.3	480	11	US-11-087-099-6193	Sequence 6193, Ap	461	26	61.9	154	11	US-11-188-298-15373	Sequence 15373, A
389	27	64.3	480	11	US-11-087-099-6825	Sequence 6825, Ap	462	26	61.9	162	9	US-10-657-657-5624	Sequence 5624, Ap
390	27	64.3	482	11	US-11-198-886-31	Sequence 31, Appl	463	26	61.9	164	9	US-10-714-887-334	Sequence 334, App
391	27	64.3	491	11	US-11-072-175-147	Sequence 147, App	464	26	61.9	167	11	US-11-087-099-2010	Sequence 2010, Ap
392	27	64.3	492	9	US-10-793-626-770	Sequence 770, App	465	26	61.9	169	11	US-11-072-512-3549	Sequence 3549, Ap
393	27	64.3	492	11	US-11-188-298-21676	Sequence 21676, A	466	26	61.9	170	11	US-11-087-099-4603	Sequence 4603, Ap
394	27	64.3	493	11	US-11-087-099-5102	Sequence 5102, Ap	467	26	61.9	172	11	US-11-188-298-21182	Sequence 21182, A
395	27	64.3	496	11	US-11-188-298-8567	Sequence 8567, Ap	468	26	61.9	173	11	US-11-096-568A-11122	Sequence 1122, Ap
396	27	64.3	500	11	US-11-188-298-7890	Sequence 7890, Ap	469	26	61.9	174	11	US-11-087-099-12023	Sequence 12023, A
397	27	64.3	500	11	US-11-188-298-8362	Sequence 8362, Ap	470	26	61.9	177	11	US-11-215-658-11	Sequence 11, Appl
398	27	64.3	511	11	US-11-087-099-10617	Sequence 10617, A	471	26	61.9	178	11	US-11-188-298-19891	Sequence 19891, A
399	27	64.3	511	11	US-11-188-298-9818	Sequence 9818, Ap	472	26	61.9	180	11	US-11-172-740-1863	Sequence 1863, Ap
400	27	64.3	512	11	US-11-087-099-262	Sequence 262, App	473	26	61.9	180	11	US-11-172-740-1864	Sequence 1864, Ap
401	27	64.3	518	11	US-11-096-568A-25396	Sequence 25396, A	474	26	61.9	180	11	US-11-172-740-1865	Sequence 1865, Ap
402	27	64.3	533	11	US-11-188-298-12288	Sequence 12288, A	475	26	61.9	189	11	US-11-188-298-22339	Sequence 22339, A
403	27	64.3	550	9	US-10-485-517-223	Sequence 223, App	476	26	61.9	191	9	US-10-644-807-422	Sequence 422, App
404	27	64.3	559	11	US-11-188-298-98829	Sequence 9829, Ap	477	26	61.9	195	11	US-11-096-568A-11653	Sequence 11653, A
405	27	64.3	587	11	US-11-188-298-5880	Sequence 5880, Ap	478	26	61.9	198	11	US-11-096-568A-1121	Sequence 1121, Ap
406	27	64.3	594	9	US-10-997-247-2	Sequence 2, Appl1	479	26	61.9	202	11	US-11-087-099-10419	Sequence 10419, A
407	27	64.3	594	11	US-11-130-559-2	Sequence 2, Appl1	480	26	61.9	205	9	US-10-793-626-202	Sequence 202, App
408	27	64.3	602	11	US-11-079-463-6002	Sequence 6002, Ap	481	26	61.9	209	11	US-11-096-568A-4294	Sequence 4294, Ap
409	27	64.3	632	11	US-11-188-298-3895	Sequence 3895, Ap	482	26	61.9	210	11	US-11-096-568A-4293	Sequence 4293, Ap
410	27	64.3	634	11	US-11-188-298-20578	Sequence 20578, A	483	26	61.9	211	11	US-11-098-666-11108	Sequence 11108, A
411	27	64.3	635	11	US-11-188-298-18018	Sequence 18018, A	484	26	61.9	212	7	US-09-978-360A-426	Sequence 426, App
412	27	64.3	635	11	US-11-188-298-13147	Sequence 13147, A	485	26	61.9	215	11	US-11-098-666-10440	Sequence 10440, A
413	27	64.3	656	11	US-11-188-298-17371	Sequence 17371, A	486	26	61.9	221	11	US-11-096-568A-4292	Sequence 4292, Ap
414	27	64.3	657	11	US-11-188-298-17950	Sequence 17950, A	487	26	61.9	221	11	US-11-096-568A-26111	Sequence 26111, A
415	27	64.3	658	11	US-11-072-175-163	Sequence 163, App	488	26	61.9	226	11	US-11-264-096-1247	Sequence 1247, Ap
416	27	64.3	681	11	US-11-087-099-7473	Sequence 7473, Ap	489	26	61.9	228	11	US-11-087-099-11122	Sequence 11122, A
417	27	64.3	729	11	US-11-188-298-13328	Sequence 13328, A	490	26	61.9	228	11	US-11-096-568A-25165	Sequence 25165, A
418	27	64.3	758	11	US-11-087-099-7427	Sequence 7427, Ap	491	26	61.9	229	11	US-11-087-099-860	Sequence 860, App
419	27	64.3	840	9	US-10-645-441-1	Sequence 1, Appl1	492	26	61.9	232	9	US-10-467-9628-87	Sequence 87, Appl
420	27	64.3	840	9	US-10-725-475-16	Sequence 16, Appl	493	26	61.9	232	11	US-11-096-568A-11652	Sequence 11652, A
421	27	64.3	842	9	US-10-645-441-2	Sequence 2, Appl1	494	26	61.9	232	11	US-11-096-568A-4298	Sequence 4298, Ap
422	27	64.3	214	11	US-11-043-889-2	Sequence 2, Appl1	495	26	61.9	237	11	US-11-098-666-11055	Sequence 11055, A
423	27	64.3	3157	11	US-11-052-554A-142	Sequence 142, App	496	26	61.9	242	11	US-11-087-099-10602	Sequence 10602, A
424	27	64.3	3803	9	US-10-995-561-773	Sequence 773, App	497	26	61.9	242	11	US-11-188-298-9800	Sequence 9800, Ap
425	27	64.3	3960	9	US-10-995-561-771	Sequence 771, App	498	26	61.9	250	10	US-11-301-554-1677	Sequence 1677, Ap
426	27	64.3	5335	9	US-10-995-561-777	Sequence 777, App	499	26	61.9	250	10	US-11-301-554-1874	Sequence 1874, Ap
427	27	64.3	5406	9	US-10-995-561-774	Sequence 774, App	500	26	61.9	250	10	US-11-301-554-2004	Sequence 2004, Ap
428	27	64.3	5415	9	US-10-995-561-779	Sequence 779, App	501	26	61.9	250	11	US-11-055-822-818	Sequence 818, App
429	27	64.3	5464	9	US-10-995-561-775	Sequence 775, App	502	26	61.9	252	9	US-10-595-454-1373	Sequence 1373, Ap
430	27	64.3	5935	9	US-10-995-561-776	Sequence 776, App	503	26	61.9	254	9	US-10-995-561-1021	Sequence 1021, Ap
431	26	61.9	10	9	US-10-974-127A-42	Sequence 42, Appl	504	26	61.9	255	11	US-11-096-568A-20833	Sequence 20833, A
432	26	61.9	55	11	US-11-240-769-80	Sequence 80, Appl	505	26	61.9	256	11	US-10-485-517-378	Sequence 378, App
433	26	61.9	62	11	US-11-188-298-15433	Sequence 15433, A	506	26	61.9	257	9	US-11-188-298-18465	Sequence 18465, A
434	26	61.9	76	11	US-11-096-568A-30950	Sequence 30950, A	507	26	61.9	258	11	US-11-096-568A-5061	Sequence 5061, Ap
435	26	61.9	80	11	US-11-264-096-845	Sequence 845, App	508	26	61.9	260	8	US-10-511-937-2438	Sequence 2438, Ap
436	26	61.9	95	11	US-11-079-463-9865	Sequence 9865, Ap	509	26	61.9	260	8	US-10-511-937-2970	Sequence 2970, Ap
437	26	61.9	101	9	US-10-530-253-33	Sequence 33, Appl	510	26	61.9	260	9	US-10-995-561-549	Sequence 549, App
438	26	61.9	113	11	US-11-096-568A-12061	Sequence 12061, A	511	26	61.9	260	9	US-10-995-561-550	Sequence 551, App
439	26	61.9	125	9	US-10-644-807-243	Sequence 243, App	512	26	61.9	260	9	US-10-995-561-551	Sequence 551, App
440	26	61.9	135	9	US-10-644-807-336	Sequence 336, App	513	26	61.9	261	9	US-10-878-556A-180	Sequence 180, App
441	26	61.9	126	9	US-10-492-570-1925	Sequence 1925, Ap	514	26	61.9	263	8	US-10-505-928-610	Sequence 610, App
442	26	61.9	136	9	US-11-087-099-8560	Sequence 8560, Ap	515	26	61.9	263	9	US-10-131-826A-484	Sequence 484, App
443	26	61.9	137	11	US-11-096-568A-12060	Sequence 12060, A	516	26	61.9	263	9	US-10-821-234-1403	Sequence 1403, App
444	26	61.9	139	9	US-10-793-626-2992	Sequence 2992, App	517	26	61.9	263	9	US-10-954-468-45	Sequence 45, Appl
445	26	61.9	139	9	US-10-504-389A-28	Sequence 28, Appl	518	26	61.9	263	9	US-10-973-115B-484	Sequence 484, App
446	26	61.9	140	11	US-11-193-512-27	Sequence 27, Appl	519	26	61.9	263	9	US-10-137-873A-484	Sequence 484, App
447	26	61.9	140	11	US-11-193-512-63	Sequence 63, Appl	520	26	61.9	263	9	US-10-152-370-484	Sequence 484, App
448	26	61.9	140	11	US-11-193-512-74	Sequence 74, Appl	521	26	61.9	263	11	US-11-155-114A-2	Sequence 2, Appl1
449	26	61.9	140	11	US-11-193-512-78	Sequence 78, Appl	522	26	61.9	263	11	US-11-290-153-484	Sequence 484, App
450	26	61.9	140	11	US-11-193-512-83	Sequence 83, Appl	523	26	61.9	264	11	US-11-096-568A-5060	Sequence 5060, Ap
451	26	61.9	141	11	US-11-188-298-3055	Sequence 3055, Ap	524	26	61.9	265	11	US-11-087-099-5951	Sequence 5951, Ap
452	26	61.9	141	11	US-11-188-298-14486	Sequence 14486, A	525	26	61.9	267	11	US-11-096-568A-1120	Sequence 1120, Ap
453	26	61.9	142	11	US-11-170-453-7	Sequence 7, Appl1	526	26	61.9	268	11	US-11-096-568A-4059	Sequence 5059, App
454	26	61.9	143	9	US-10-714-887-336	Sequence 336, App	527	26	61.9	271	11	US-11-096-568A-22291	Sequence 22291, A
455	26	61.9	144	9	US-10-506-454-1152	Sequence 1152, App	528	26	61.9	273	11	US-11-087-099-8716	Sequence 8716, Ap
456	26	61.9	147	11	US-11-204-311-488	Sequence 488, App	529	26	61.9	275	11	US-11-188-298-22510	Sequence 22510, A
457	26	61.9	148	11	US-11-188-298-17653	Sequence 17653, A	530	26	61.9	276	10	US-11-252-080-125	Sequence 12, Appl1
458	26	61.9	150	7	US-09-978-360A-567	Sequence 567, App	531	26	61.9	278	11	US-11-096-568A-22290	Sequence 22290, A
459	26	61.9	153	11	US-11-172-740-1861	Sequence 1861, Ap	532	26	61.9	280	9	US-10-000-997-49	Sequence 49, Appl1

533	26	61.9	285	11	US-11-096-568A-4297	Sequence 4297, Ap	606	26	61.9	409	11	US-11-079-463-8480	Sequence 8480, Ap
534	26	61.9	285	11	US-11-188-298-8208	Sequence 8208, Ap	607	26	61.9	416	11	US-11-096-568A-31086	Sequence 31086, A
535	26	61.9	286	10	US-11-301-554-1878	Sequence 1878, Ap	608	26	61.9	420	9	US-10-467-657-5236	Sequence 5226, Ap
536	26	61.9	286	11	US-11-240-769-96	Sequence 96, Ap	609	26	61.9	420	9	US-10-995-561-1017	Sequence 1017, Ap
537	26	61.9	287	11	US-11-079-463-5988	Sequence 5988, Ap	610	26	61.9	424	11	US-11-090-433-5	Sequence 5, Ap
538	26	61.9	288	11	US-11-096-568A-22289	Sequence 22289, Ap	611	26	61.9	426	11	US-11-188-298-5148	Sequence 5148, Ap
539	26	61.9	290	11	US-11-188-298-4967	Sequence 4967, A	612	26	61.9	426	11	US-11-188-298-16384	Sequence 16384, A
540	26	61.9	290	11	US-11-188-298-10867	Sequence 10867, A	613	26	61.9	427	11	US-11-087-099-4184	Sequence 4184, Ap
541	26	61.9	296	9	US-10-467-657-2860	Sequence 2860, Ap	614	26	61.9	422	11	US-11-188-298-65298	Sequence 6295, A
542	26	61.9	304	11	US-11-079-463-5745	Sequence 5745, Ap	615	26	61.9	422	11	US-11-188-298-12975	Sequence 12975, A
543	26	61.9	305	11	US-11-080-991-92	Sequence 92, Ap	616	26	61.9	432	11	US-11-188-298-18197	Sequence 18197, A
544	26	61.9	305	11	US-11-250-759-278	Sequence 278, Ap	617	26	61.9	430	11	US-11-096-568A-23217	Sequence 32317, A
545	26	61.9	305	11	US-11-250-759-279	Sequence 279, App	618	26	61.9	430	11	US-11-096-568A-31621	Sequence 31621, A
546	26	61.9	305	11	US-11-250-759-280	Sequence 280, App	619	26	61.9	440	11	US-11-194-053-4	Sequence 4, Ap
547	26	61.9	306	11	US-11-087-099-4151	Sequence 4151, Ap	620	26	61.9	441	11	US-11-188-298-19354	Sequence 19354, A
548	26	61.9	306	11	US-11-087-099-5536	Sequence 5536, Ap	621	26	61.9	442	11	US-11-188-298-13605	Sequence 13605, A
549	26	61.9	306	11	US-11-096-568A-31432	Sequence 31432, A	622	26	61.9	444	11	US-11-043-788-311	Sequence 311, App
550	26	61.9	306	11	US-11-188-298-9890	Sequence 9890, Ap	623	26	61.9	445	11	US-11-087-099-2557	Sequence 2557, Ap
551	26	61.9	306	11	US-11-188-298-18241	Sequence 18241, A	624	26	61.9	447	9	US-10-493-909-82	Sequence 82, Ap
552	26	61.9	307	11	US-11-092-140-35	Sequence 2860, A	625	26	61.9	447	11	US-11-087-099-8364	Sequence 8364, Ap
553	26	61.9	307	11	US-11-087-099-11161	Sequence 11161, A	626	26	61.9	447	11	US-11-188-298-18751	Sequence 18751, A
554	26	61.9	312	11	US-11-008-570-41	Sequence 41, Ap	627	26	61.9	447	11	US-11-641-678-38	Sequence 38, Ap
555	26	61.9	312	11	US-11-008-570-42	Sequence 42, Ap	628	26	61.9	450	11	US-11-096-568A-27505	Sequence 27505, A
556	26	61.9	313	11	US-11-087-099-9133	Sequence 9133, Ap	629	26	61.9	450	11	US-11-188-298-12102	Sequence 12102, A
557	26	61.9	316	11	US-11-045-004-1115	Sequence 1115, Ap	630	26	61.9	451	11	US-11-188-298-20032	Sequence 20032, A
558	26	61.9	317	11	US-11-087-099-12198	Sequence 12198, A	631	26	61.9	452	11	US-11-188-298-224	Sequence 224, App
559	26	61.9	318	11	US-11-087-099-7316	Sequence 7316, Ap	632	26	61.9	453	11	US-11-052-554A-224	Sequence 224, App
560	26	61.9	321	11	US-11-087-099-5156	Sequence 5156, Ap	633	26	61.9	453	11	US-11-264-096-712	Sequence 712, App
561	26	61.9	321	11	US-11-087-099-7305	Sequence 7305, Ap	634	26	61.9	454	11	US-11-264-096-713	Sequence 713, App
562	26	61.9	321	11	US-11-087-099-12443	Sequence 12443, A	635	26	61.9	454	11	US-11-188-298-11491	Sequence 11491, A
563	26	61.9	321	11	US-11-079-463-10003	Sequence 10003, A	636	26	61.9	455	11	US-11-096-568A-33316	Sequence 33316, A
564	26	61.9	324	11	US-11-087-099-11792	Sequence 11792, A	637	26	61.9	456	11	US-11-096-568A-31620	Sequence 31620, A
565	26	61.9	325	11	US-11-188-298-11485	Sequence 11485, A	638	26	61.9	459	11	US-10-512-376-6	Sequence 6, Ap
566	26	61.9	326	11	US-11-096-568A-20832	Sequence 20832, A	639	26	61.9	459	11	US-11-188-298-1337	Sequence 1337, Ap
567	26	61.9	328	11	US-11-188-298-20888	Sequence 20888, A	640	26	61.9	462	11	US-11-087-099-1445	Sequence 1445, Ap
568	26	61.9	329	11	US-11-087-099-10884	Sequence 10884, A	641	26	61.9	462	11	US-11-087-099-2732	Sequence 2732, Ap
569	26	61.9	331	9	US-10-506-454-770	Sequence 770, App	642	26	61.9	463	11	US-11-087-099-4231	Sequence 4231, Ap
570	26	61.9	334	9	US-10-497-135-16	Sequence 16, Ap	643	26	61.9	467	11	US-11-082-899-334	Sequence 334, App
571	26	61.9	334	11	US-11-269-215-16	Sequence 16, Ap	644	26	61.9	475	11	US-11-087-099-5183	Sequence 5183, Ap
572	26	61.9	334	11	US-11-264-096-1246	Sequence 1246, Ap	645	26	61.9	475	11	US-11-096-568A-31619	Sequence 31619, A
573	26	61.9	336	11	US-11-087-099-4069	Sequence 4069, Ap	646	26	61.9	475	11	US-11-188-298-15792	Sequence 15792, A
575	26	61.9	337	9	US-10-497-135-15	Sequence 15, Ap	647	26	61.9	477	11	US-11-096-568A-33315	Sequence 33315, A
576	26	61.9	337	11	US-11-045-004-766	Sequence 766, App	648	26	61.9	478	11	US-11-087-099-7108	Sequence 7108, Ap
577	26	61.9	337	11	US-11-269-215-15	Sequence 15, Ap	649	26	61.9	481	9	US-10-512-376-5	Sequence 5, Ap
578	26	61.9	338	11	US-11-087-099-7378	Sequence 7378, Ap	650	26	61.9	482	11	US-11-096-568A-27735	Sequence 2735, Ap
579	26	61.9	344	11	US-11-079-463-9234	Sequence 9234, Ap	651	26	61.9	488	11	US-11-087-099-2739	Sequence 2739, A
580	26	61.9	345	11	US-11-210-316-14	Sequence 14, Ap	652	26	61.9	488	11	US-11-188-298-19138	Sequence 19138, A
581	26	61.9	347	11	US-11-188-298-4925	Sequence 4925, Ap	653	26	61.9	494	11	US-11-143-880-54	Sequence 54, Ap
582	26	61.9	347	11	US-11-188-298-11437	Sequence 11437, A	654	26	61.9	495	11	US-11-124-367A-349	Sequence 349, App
583	26	61.9	349	9	US-10-485-517-417	Sequence 417, App	655	26	61.9	495	11	US-11-143-880-61	Sequence 61, App
584	26	61.9	350	11	US-11-079-463-6050	Sequence 6050, Ap	656	26	61.9	497	11	US-11-096-568A-6429	Sequence 6429, Ap
585	26	61.9	350	11	US-11-045-004-1729	Sequence 1729, Ap	657	26	61.9	498	11	US-11-188-298-6602	Sequence 6602, Ap
586	26	61.9	350	11	US-11-144-947-452	Sequence 452, App	658	26	61.9	498	11	US-11-188-298-6602	Sequence 6602, Ap
587	26	61.9	353	11	US-11-087-099-6584	Sequence 6584, Ap	659	26	61.9	501	11	US-11-113-424-68	Sequence 68, Ap
588	26	61.9	356	9	US-10-506-454-753	Sequence 753, App	660	26	61.9	501	11	US-11-096-568A-20831	Sequence 20831, A
589	26	61.9	357	9	US-10-510-507-1	Sequence 1, Ap	661	26	61.9	502	11	US-11-113-424-65	Sequence 65, Ap
590	26	61.9	357	11	US-11-080-991-60	Sequence 60, App	662	26	61.9	502	11	US-11-113-424-66	Sequence 66, Ap
591	26	61.9	357	11	US-11-169-041-159	Sequence 159, App	663	26	61.9	505	11	US-10-493-909-81	Sequence 81, Ap
592	26	61.9	357	11	US-11-087-099-7624	Sequence 7624, App	664	26	61.9	506	11	US-11-087-099-963	Sequence 963, App
593	26	61.9	358	9	US-10-467-657-6970	Sequence 6970, Ap	665	26	61.9	507	11	US-11-124-367A-351	Sequence 351, App
594	26	61.9	360	11	US-11-096-568A-27737	Sequence 27737, A	666	26	61.9	510	11	US-11-096-568A-31885	Sequence 31885, A
595	26	61.9	367	11	US-11-096-568A-4296	Sequence 4296, Ap	667	26	61.9	513	9	US-10-873-528-37	Sequence 37, App
596	26	61.9	369	11	US-11-087-099-1385	Sequence 1385, Ap	668	26	61.9	513	9	US-10-873-528-193	Sequence 193, App
597	26	61.9	380	9	US-10-506-454-1547	Sequence 1547, Ap	669	26	61.9	516	11	US-11-096-568A-6428	Sequence 6428, App
598	26	61.9	382	11	US-11-188-298-15454	Sequence 1876, Ap	670	26	61.9	516	11	US-11-188-298-6224	Sequence 6224, Ap
599	26	61.9	384	10	US-11-301-554-1876	Sequence 1873, Ap	671	26	61.9	520	11	US-11-087-099-1803	Sequence 1803, Ap
600	26	61.9	387	11	US-11-188-298-3873	Sequence 1361, Ap	672	26	61.9	520	11	US-11-087-099-9401	Sequence 9401, Ap
601	26	61.9	390	11	US-11-045-004-1361	Sequence 1361, Ap	673	26	61.9	526	9	US-10-467-657-2186	Sequence 2186, Ap
602	26	61.9	394	11	US-11-096-568A-27736	Sequence 27736, A	674	26	61.9	526	9	US-11-096-568A-6427	Sequence 6427, Ap
603	26	61.9	395	11	US-11-096-568A-10801	Sequence 10801, A	675	26	61.9	529	11	US-11-188-298-16383	Sequence 16383, A
604	26	61.9	404	9	US-10-793-626-1204	Sequence 1204, Ap	676	26	61.9	530	11	US-11-188-298-14350	Sequence 14350, A
605	26	61.9	404	11	US-11-188-298-5125	Sequence 5125, Ap	677	26	61.9	532	8	US-10-505-928-499	Sequence 499, App

679	26	61.9	532	9	US-10-857-780-18	Sequence 18, Appl	752	26	61.9	992	11	US-11-098-686-10761	Sequence 10761, A
680	26	61.9	532	9	US-10-995-561-897	Sequence 897, App	753	26	61.9	1070	11	US-11-087-099-5857	Sequence 5857, Ap
681	26	61.9	532	9	US-10-493-909-2	Sequence 2, Appl1	754	26	61.9	1160	9	US-10-995-561-1019	Sequence 1019, Ap
682	26	61.9	532	9	US-10-493-909-63	Sequence 63, Appl	755	26	61.9	1175	11	US-11-188-298-22492	Sequence 22492, A
683	26	61.9	532	11	US-11-104-812-2	Sequence 2, Appl1	756	26	61.9	1234	9	US-10-528-031-147	Sequence 47, Appl
684	26	61.9	532	11	US-11-105-279-2	Sequence 2, Appl1	757	26	61.9	1302	9	US-10-995-561-1024	Sequence 1024, Ap
685	26	61.9	532	11	US-11-107-028-22	Sequence 22, Appl	758	26	61.9	1306	9	US-10-995-561-1037	Sequence 1037, Ap
686	26	61.9	532	11	US-11-043-788-307	Sequence 307, App	759	26	61.9	1367	11	US-11-045-004-2496	Sequence 2496, Ap
687	26	61.9	532	11	US-11-043-788-308	Sequence 308, App	760	26	61.9	1912	11	US-11-288-493-64	Sequence 64, Appl
688	26	61.9	541	11	US-11-169-041-136	Sequence 136, App	761	26	61.9	2070	11	US-11-188-298-13390	Sequence 1390, A
689	26	61.9	545	11	US-11-188-298-2157	Sequence 2157, App	762	26	61.9	2215	8	US-10-505-928-310	Sequence 310, App
690	26	61.9	546	11	US-11-096-568A-31804	Sequence 31804, A	763	25	60.7	358	11	US-11-188-298-16059	Sequence 16059, A
691	26	61.9	550	11	US-11-188-298-7256	Sequence 7256, Ap	764	25	60.7	774	11	US-11-070-627-7	Sequence 7, Appl1
692	26	61.9	552	9	US-10-131-826A-332	Sequence 332, App	765	25	59.5	56	11	US-11-096-568A-8131	Sequence 8131, Ap
693	26	61.9	552	9	US-10-973-115B-332	Sequence 332, App	766	25	59.5	60	11	US-11-004-339-2248	Sequence 2248, Ap
694	26	61.9	552	9	US-10-137-873A-332	Sequence 332, App	767	25	59.5	72	9	US-11-044-807-438	Sequence 438, App
695	26	61.9	552	9	US-10-152-370-332	Sequence 332, App	768	25	59.5	82	9	US-10-485-517-372	Sequence 372, App
696	26	61.9	552	11	US-11-087-099-9304	Sequence 9304, Ap	769	25	59.5	90	11	US-11-000-463-371	Sequence 371, App
697	26	61.9	552	11	US-11-290-153-332	Sequence 332, App	770	25	59.5	90	11	US-11-000-463-843	Sequence 843, App
698	26	61.9	560	9	US-10-995-561-1026	Sequence 1026, Ap	771	25	59.5	103	11	US-11-188-298-15255	Sequence 15255, A
699	26	61.9	567	11	US-11-096-568A-31803	Sequence 31803, A	772	25	59.5	104	9	US-10-986-405-260	Sequence 260, App
700	26	61.9	567	11	US-11-188-298-9207	Sequence 9207, App	773	25	59.5	115	9	US-10-492-570-1924	Sequence 1924, App
701	26	61.9	568	11	US-11-188-298-2609	Sequence 2609, Ap	774	25	59.5	115	11	US-11-008-570-102	Sequence 102, App
702	26	61.9	568	11	US-11-188-298-2613	Sequence 2613, Ap	775	25	59.5	116	11	US-11-096-568A-1403	Sequence 1403, Ap
703	26	61.9	569	11	US-11-096-568A-30643	Sequence 30643, A	776	25	59.5	118	11	US-11-008-570-94	Sequence 94, Appl
704	26	61.9	575	9	US-10-915-002-202	Sequence 202, App	777	25	59.5	118	11	US-11-008-570-96	Sequence 98, Appl
705	26	61.9	579	11	US-11-188-298-6163	Sequence 6163, Ap	778	25	59.5	118	11	US-11-096-568A-1402	Sequence 1402, Ap
706	26	61.9	582	11	US-11-096-568A-24623	Sequence 24623, A	779	25	59.5	126	9	US-10-492-570-1920	Sequence 1920, Ap
707	26	61.9	585	11	US-11-096-568A-31084	Sequence 31084, A	780	25	59.5	131	9	US-10-506-454-1183	Sequence 1183, Ap
708	26	61.9	586	11	US-11-096-568A-33385	Sequence 33385, A	781	25	59.5	131	11	US-11-188-298-3917	Sequence 3917, Ap
709	26	61.9	590	11	US-11-096-568A-12737	Sequence 12737, A	782	25	59.5	132	11	US-11-096-568A-8663	Sequence 8663, Ap
710	26	61.9	593	11	US-11-188-298-21880	Sequence 21880, A	783	25	59.5	133	11	US-11-113-424-10	Sequence 10, Appl
711	26	61.9	596	11	US-11-096-568A-31802	Sequence 31802, A	784	25	59.5	133	11	US-11-096-568A-20141	Sequence 20141, A
712	26	61.9	596	11	US-11-188-298-8338	Sequence 8338, Ap	785	25	59.5	138	11	US-11-072-512-3612	Sequence 3612, Ap
713	26	61.9	601	11	US-11-096-568A-33384	Sequence 33384, Ap	786	25	59.5	139	11	US-11-072-512-3867	Sequence 3867, Ap
714	26	61.9	605	11	US-11-096-568A-24622	Sequence 24622, A	787	25	59.5	140	11	US-11-096-568A-30294	Sequence 30294, A
715	26	61.9	615	11	US-11-096-568A-31197	Sequence 31197, A	788	25	59.5	142	11	US-11-074-176-112	Sequence 112, App
716	26	61.9	616	9	US-10-995-561-1018	Sequence 1018, Ap	789	25	59.5	144	11	US-11-188-298-382	Sequence 382, App
717	26	61.9	616	9	US-10-995-561-1022	Sequence 1022, Ap	790	25	59.5	148	11	US-11-052-554A-359	Sequence 359, App
718	26	61.9	616	11	US-11-087-099-1447	Sequence 1447, Ap	791	25	59.5	148	11	US-11-079-463-10156	Sequence 10156, A
719	26	61.9	627	11	US-11-037-829A-1	Sequence 1, Appl1	792	25	59.5	149	9	US-10-506-454-521	Sequence 521, App
720	26	61.9	627	11	US-11-122-144-6	Sequence 6, Appl1	793	25	59.5	153	11	US-11-096-568A-8662	Sequence 8662, Ap
721	26	61.9	631	11	US-11-188-298-4366	Sequence 4366, Ap	794	25	59.5	154	11	US-11-096-568A-8661	Sequence 8661, Ap
722	26	61.9	631	11	US-11-188-298-8127	Sequence 8127, Ap	795	25	59.5	157	11	US-11-234-786-589	Sequence 589, App
723	26	61.9	633	11	US-11-087-099-11505	Sequence 11505, A	796	25	59.5	160	11	US-11-096-568A-11185	Sequence 11185, A
724	26	61.9	639	11	US-11-188-298-21511	Sequence 21511, A	797	25	59.5	163	11	US-11-134-811-77	Sequence 77, Appl
725	26	61.9	644	11	US-11-079-463-5855	Sequence 5855, A	798	25	59.5	164	11	US-11-008-570-106	Sequence 106, App
726	26	61.9	647	11	US-11-188-298-15615	Sequence 15615, A	799	25	59.5	166	11	US-11-008-570-112	Sequence 112, App
727	26	61.9	659	9	US-10-467-657-6006	Sequence 6006, Ap	800	25	59.5	170	11	US-11-096-568A-24776	Sequence 24776, A
728	26	61.9	660	11	US-11-096-568A-33383	Sequence 33383, A	801	25	59.5	171	11	US-11-096-568A-1481	Sequence 1481, Ap
729	26	61.9	665	11	US-10-455-772-1126	Sequence 1126, Ap	802	25	59.5	172	11	US-11-087-099-15055	Sequence 6028, A
730	26	61.9	671	11	US-11-079-463-8638	Sequence 8638, Ap	803	25	59.5	172	11	US-11-079-463-6028	Sequence 9804, Ap
731	26	61.9	673	11	US-11-096-568A-24621	Sequence 24621, A	804	25	59.5	174	11	US-11-087-099-9804	Sequence 430, App
732	26	61.9	673	11	US-11-079-463-6405	Sequence 6405, Ap	805	25	59.5	176	9	US-10-194-487-430	Sequence 430, App
733	26	61.9	679	11	US-11-188-298-6682	Sequence 6682, Ap	806	25	59.5	176	9	US-10-195-883-430	Sequence 430, App
734	26	61.9	691	11	US-11-188-298-8747	Sequence 8747, Ap	807	25	59.5	176	9	US-10-195-888-430	Sequence 430, App
735	26	61.9	696	11	US-11-188-298-19081	Sequence 19081, A	808	25	59.5	176	9	US-10-195-888-430	Sequence 430, App
736	26	61.9	697	9	US-10-703-799B-226	Sequence 226, App	809	25	59.5	177	11	US-11-096-568A-4986	Sequence 2701, Ap
737	26	61.9	697	11	US-11-082-389-362	Sequence 362, App	810	25	59.5	184	11	US-11-090-439-13	Sequence 13, Appl
738	26	61.9	707	11	US-11-096-568A-31196	Sequence 31196, A	811	25	59.5	184	11	US-11-096-568A-4986	Sequence 4986, Ap
739	26	61.9	709	11	US-11-087-099-1066	Sequence 1066, Ap	812	25	59.5	184	11	US-11-097-960-13	Sequence 13, Appl
740	26	61.9	722	11	US-11-043-889-10	Sequence 1066, Ap	813	25	59.5	184	11	US-11-264-096-840	Sequence 840, App
741	26	61.9	725	11	US-11-096-568A-31195	Sequence 31195, A	814	25	59.5	184	11	US-11-264-096-1148	Sequence 1248, Ap
742	26	61.9	732	9	US-10-518-599-23	Sequence 23, Appl	815	25	59.5	184	11	US-11-188-298-1249	Sequence 1249, Ap
743	26	61.9	732	9	US-10-995-561-1020	Sequence 1020, App	816	25	59.5	190	11	US-11-188-298-15108	Sequence 15108, A
744	26	61.9	739	9	US-10-506-454-014	Sequence 914, App	817	25	59.5	192	11	US-11-096-568A-8275	Sequence 8275, Ap
745	26	61.9	744	11	US-11-045-004-2659	Sequence 2659, Ap	818	25	59.5	194	11	US-11-096-568A-4985	Sequence 4985, Ap
746	26	61.9	747	11	US-11-210-316-2	Sequence 2, Appl1	819	25	59.5	196	9	US-10-793-626-2584	Sequence 2584, Ap
747	26	61.9	789	11	US-11-188-298-279	Sequence 279, App	820	25	59.5	196	11	US-11-087-099-11991	Sequence 11991, A
748	26	61.9	814	11	US-11-096-568A-30418	Sequence 30418, A	821	25	59.5	198	11	US-11-082-389-74	Sequence 74, Appl
749	26	61.9	819	11	US-11-079-463-7787	Sequence 7787, Ap	822	25	59.5	198	11	US-11-096-568A-20140	Sequence 20140, A
750	26	61.9	954	11	US-11-079-463-6804	Sequence 6804, Ap	823	25	59.5	199	11	US-11-096-568A-30293	Sequence 30293, A
751	26	61.9	971	11	US-11-188-298-4425	Sequence 4425, Ap	824	25	59.5	200	11	US-11-045-004-598	Sequence 598, App

825	25	59.5	204	11	US-11-045-004-1419	Sequence 1419, Ap	898	25	59.5	310	11	US-11-188-298-8689	Sequence 8689, Ap
826	25	59.5	222	8	US-10-525-019-13	Sequence 13, Appl	899	25	59.5	312	11	US-11-188-298-17601	Sequence 17601, A
827	25	59.5	222	9	US-10-878-568A-124	Sequence 124, App	900	25	59.5	313	9	US-10-467-657-1380	Sequence 1380, Ap
828	25	59.5	224	11	US-11-096-568A-1480	Sequence 1480, Ap	901	25	59.5	314	11	US-11-008-570-43	Sequence 43, Appl
829	25	59.5	225	11	US-11-079-463-7498	Sequence 7498, Ap	902	25	59.5	316	11	US-11-096-568A-24774	Sequence 24774, A
830	25	59.5	225	11	US-11-188-298-12886	Sequence 12886, A	903	25	59.5	316	11	US-11-188-298-6715	Sequence 6715, Ap
831	25	59.5	225	11	US-11-188-298-22183	Sequence 22183, A	904	25	59.5	316	11	US-11-188-298-15032	Sequence 15032, A
832	25	59.5	228	7	US-09-978-360A-516	Sequence 516, App	905	25	59.5	329	11	US-11-188-298-4001	Sequence 4001, Ap
833	25	59.5	229	11	US-11-096-568A-10434	Sequence 10434, A	906	25	59.5	330	11	US-11-188-298-9491	Sequence 9491, Ap
834	25	59.5	230	11	US-11-087-099-4696	Sequence 4696, Ap	907	25	59.5	331	11	US-11-188-298-15563	Sequence 15563, A
835	25	59.5	231	9	US-10-467-657-2996	Sequence 2996, Ap	908	25	59.5	333	11	US-11-188-298-701	Sequence 701, App
836	25	59.5	231	11	US-11-024-859-320	Sequence 320, App	909	25	59.5	334	11	US-11-188-298-7728	Sequence 7728, Ap
837	25	59.5	231	11	US-11-024-859-322	Sequence 322, App	910	25	59.5	336	11	US-11-188-298-21103	Sequence 21103, A
838	25	59.5	231	11	US-11-050-857-254	Sequence 254, App	911	25	59.5	328	11	US-11-207-626A-35	Sequence 35, Appl
839	25	59.5	232	11	US-11-079-463-10258	Sequence 10258, A	912	25	59.5	339	11	US-11-045-004-641	Sequence 641, App
840	25	59.5	233	9	US-10-858-730-234	Sequence 234, App	913	25	59.5	339	11	US-11-113-424-40	Sequence 40, Appl
841	25	59.5	233	11	US-11-055-822-54	Sequence 54, Appl	914	25	59.5	330	11	US-11-087-099-4487	Sequence 4487, Ap
842	25	59.5	233	11	US-11-239-674-52	Sequence 52, Appl	915	25	59.5	330	11	US-11-087-099-7657	Sequence 7657, Ap
843	25	59.5	234	11	US-11-096-568A-7573	Sequence 7573, Ap	916	25	59.5	331	9	US-10-216-161A-236	Sequence 236, App
844	25	59.5	235	11	US-11-096-568A-1479	Sequence 1479, Ap	917	25	59.5	331	11	US-11-087-099-11371	Sequence 11371, A
845	25	59.5	240	11	US-11-045-004-1851	Sequence 1851, Ap	918	25	59.5	332	11	US-11-008-570-40	Sequence 40, Appl
846	25	59.5	242	11	US-11-096-568A-10433	Sequence 10433, A	919	25	59.5	332	11	US-11-098-686-11282	Sequence 6233, Ap
847	25	59.5	245	9	US-10-242-586-4	Sequence 4, Appl3	920	25	59.5	333	11	US-11-096-568A-18414	Sequence 18414, A
848	25	59.5	245	9	US-10-242-902-4	Sequence 4, Appl1	921	25	59.5	335	11	US-10-485-517-234	Sequence 234, App
849	25	59.5	245	9	US-10-243-116-4	Sequence 4, Appl1	922	25	59.5	337	11	US-11-096-568A-18413	Sequence 18413, A
850	25	59.5	245	9	US-10-243-136-4	Sequence 4, Appl1	923	25	59.5	337	11	US-11-188-298-6428	Sequence 6428, Ap
851	25	59.5	245	9	US-10-243-189-4	Sequence 4, Appl1	924	25	59.5	337	11	US-11-096-568A-30107	Sequence 30107, A
852	25	59.5	245	9	US-10-243-215-4	Sequence 4, Appl1	925	25	59.5	338	11	US-11-096-568A-20263	Sequence 20263, A
853	25	59.5	245	9	US-10-243-236-4	Sequence 4, Appl1	926	25	59.5	338	11	US-11-188-298-20263	Sequence 43, Appl
854	25	59.5	245	9	US-10-243-238-4	Sequence 4, Appl1	927	25	59.5	340	11	US-11-129-143-43	Sequence 5955, Ap
855	25	59.5	245	9	US-10-243-304-4	Sequence 4, Appl1	928	25	59.5	341	11	US-11-188-298-10173	Sequence 10173, A
856	25	59.5	245	9	US-10-243-304-4	Sequence 4, Appl1	929	25	59.5	342	11	US-11-188-298-21203	Sequence 21203, A
857	25	59.5	245	9	US-10-243-348-4	Sequence 4, Appl1	930	25	59.5	342	11	US-11-188-298-31257	Sequence 31257, A
858	25	59.5	245	9	US-10-243-357-4	Sequence 4, Appl1	931	25	59.5	345	11	US-11-096-568A-10156	Sequence 10156, A
859	25	59.5	245	9	US-10-245-083-4	Sequence 4, Appl1	932	25	59.5	345	11	US-11-264-627-6	Sequence 6, Appl1
860	25	59.5	245	9	US-10-247-015-4	Sequence 4, Appl1	933	25	59.5	345	11	US-11-188-298-15189	Sequence 15189, A
861	25	59.5	246	11	US-11-264-096-1548	Sequence 1548, Ap	934	25	59.5	352	7	US-09-978-360A-437	Sequence 437, App
862	25	59.5	249	11	US-11-087-099-4378	Sequence 4378, Ap	935	25	59.5	352	11	US-11-087-099-11864	Sequence 11864, A
863	25	59.5	249	11	US-11-096-568A-20139	Sequence 20139, A	936	25	59.5	353	11	US-11-129-143-54	Sequence 54, Appl
864	25	59.5	251	9	US-10-194-487-2	Sequence 2, Appl1	937	25	59.5	353	11	US-11-129-143-55	Sequence 55, Appl
865	25	59.5	251	9	US-10-195-883-2	Sequence 2, Appl1	938	25	59.5	353	11	US-11-129-143-56	Sequence 56, Appl
866	25	59.5	251	9	US-10-195-888-2	Sequence 2, Appl1	939	25	59.5	354	11	US-11-188-298-4314	Sequence 4314, Ap
867	25	59.5	251	9	US-10-195-889-2	Sequence 2, Appl1	940	25	59.5	350	11	US-11-087-099-2497	Sequence 2497, Ap
868	25	59.5	251	11	US-11-080-991-38	Sequence 38, Appl	941	25	59.5	350	11	US-11-087-099-11952	Sequence 11952, A
869	25	59.5	252	11	US-11-096-568A-6572	Sequence 6572, Ap	942	25	59.5	351	11	US-11-188-298-446	Sequence 446, App
870	25	59.5	254	11	US-11-096-568A-6571	Sequence 6571, Ap	943	25	59.5	352	11	US-11-188-298-15189	Sequence 15189, A
871	25	59.5	255	11	US-11-115-086-11	Sequence 11, Appl	944	25	59.5	352	11	US-11-087-099-11864	Sequence 11864, A
872	25	59.5	256	7	US-09-995-493-8	Sequence 8, Appl1	945	25	59.5	353	11	US-11-129-143-54	Sequence 54, Appl
873	25	59.5	256	11	US-11-054-515-1150	Sequence 1150, Ap	946	25	59.5	353	11	US-11-129-143-55	Sequence 55, Appl
874	25	59.5	256	11	US-11-266-444-1150	Sequence 1150, Ap	947	25	59.5	353	11	US-11-129-143-56	Sequence 56, Appl
875	25	59.5	258	11	US-11-055-822-10	Sequence 10, Appl	948	25	59.5	354	11	US-11-096-568A-17162	Sequence 17162, A
876	25	59.5	258	11	US-11-239-674-16	Sequence 16, Appl	949	25	59.5	354	11	US-11-188-298-13161	Sequence 13161, A
877	25	59.5	265	9	US-10-714-887-180	Sequence 180, App	950	25	59.5	356	11	US-11-188-298-15189	Sequence 15189, A
878	25	59.5	266	11	US-11-096-568A-8274	Sequence 8274, Ap	951	25	59.5	356	11	US-11-188-298-15189	Sequence 15189, A
879	25	59.5	267	11	US-11-087-099-5704	Sequence 5704, Ap	952	25	59.5	359	11	US-11-096-568A-30106	Sequence 30106, A
880	25	59.5	267	11	US-11-096-568A-7572	Sequence 7572, Ap	953	25	59.5	361	11	US-11-188-298-10761	Sequence 10761, A
881	25	59.5	270	11	US-11-096-568A-17163	Sequence 17163, A	954	25	59.5	366	11	US-11-188-298-11332	Sequence 11332, A
882	25	59.5	280	11	US-11-072-512-3393	Sequence 3393, Ap	955	25	59.5	368	11	US-11-096-568A-28455	Sequence 28455, A
883	25	59.5	284	11	US-11-113-424-6	Sequence 6, Appl1	956	25	59.5	369	11	US-11-079-463-8993	Sequence 8993, Ap
884	25	59.5	284	11	US-11-188-298-1033	Sequence 1033, Ap	957	25	59.5	370	11	US-11-079-463-4260	Sequence 4260, Ap
885	25	59.5	286	11	US-11-129-143-64	Sequence 64, Appl	958	25	59.5	371	11	US-11-087-099-49260	Sequence 49260, Ap
886	25	59.5	292	11	US-11-045-004-8829	Sequence 2829, Ap	959	25	59.5	371	11	US-11-096-568A-28454	Sequence 28454, A
887	25	59.5	293	11	US-11-188-298-20385	Sequence 20385, A	960	25	59.5	371	11	US-11-096-568A-213702	Sequence 213702, A
888	25	59.5	298	11	US-11-188-298-8544	Sequence 8544, Ap	961	25	59.5	371	11	US-11-188-298-17161	Sequence 17161, A
889	25	59.5	299	11	US-11-113-424-8	Sequence 8, Appl1	962	25	59.5	372	11	US-11-143-980-37	Sequence 37, Appl
890	25	59.5	299	11	US-11-188-298-20307	Sequence 20307, A	963	25	59.5	373	11	US-11-087-099-110086	Sequence 110086, A
891	25	59.5	303	11	US-11-045-004-253	Sequence 253, App	964	25	59.5	373	11	US-11-096-568A-28453	Sequence 28453, A
892	25	59.5	304	11	US-11-188-298-20481	Sequence 20481, A	965	25	59.5	373	11	US-11-096-568A-29701	Sequence 29701, A
893	25	59.5	307	9	US-10-467-657-6016	Sequence 6016, Ap	966	25	59.5	374	11	US-11-207-626A-23	Sequence 23, Appl
894	25	59.5	307	11	US-11-188-298-299	Sequence 299, App	967	25	59.5	374	11	US-11-096-568A-7290	Sequence 7290, Ap
895	25	59.5	307	11	US-11-188-298-6214	Sequence 6214, Ap	968	25	59.5	374	11	US-11-096-568A-17161	Sequence 17161, A
896	25	59.5	308	11	US-11-087-099-9954	Sequence 9954, Ap	969	25	59.5	374	11	US-11-096-568A-17161	Sequence 17161, A
897	25	59.5	310	11	US-11-096-568A-6570	Sequence 6570, Ap	970	25	59.5	375	11	US-11-188-298-6523	Sequence 6523, Ap

```
971 25 59.5 376 11 US-11-075-185-15 Sequence 15, Appl
972 25 59.5 376 11 US-11-045-004-2720 Sequence 2720, Ap
973 25 59.5 377 11 US-11-096-568A-24504 Sequence 24504, A
974 25 59.5 378 11 US-11-096-568A-18412 Sequence 18412, A
975 25 59.5 379 11 US-11-096-568A-8273 Sequence 8273, Ap
976 25 59.5 380 11 US-11-087-099-11576 Sequence 11576, A
977 25 59.5 380 11 US-11-188-298-10692 Sequence 10692, A
978 25 59.5 382 11 US-11-264-627-4 Sequence 4, Appl1
979 25 59.5 383 11 US-11-072-512-3412 Sequence 3412, Ap
980 25 59.5 383 11 US-11-096-568A-29700 Sequence 29700, A
981 25 59.5 387 11 US-11-098-686-11142 Sequence 11142, A
982 25 59.5 387 11 US-11-087-099-935 Sequence 935, App
983 25 59.5 388 11 US-11-087-099-2727 Sequence 2727, Ap
984 25 59.5 388 11 US-11-082-389-172 Sequence 172, App
985 25 59.5 391 11 US-11-082-389-174 Sequence 174, App
986 25 59.5 391 11 US-11-188-298-608 Sequence 608, App
987 25 59.5 394 11 US-11-079-463-9758 Sequence 9758, Ap
988 25 59.5 394 11 US-11-188-298-5481 Sequence 5481, Ap
989 25 59.5 397 9 US-10-454-437-60 Sequence 60, Appl
990 25 59.5 398 9 US-10-703-7998-256 Sequence 256, App
991 25 59.5 398 11 US-11-096-568A-2519 Sequence 2519, Ap
992 25 59.5 398 11 US-11-096-568A-7289 Sequence 7289, Ap
993 25 59.5 399 9 US-10-533-811-63 Sequence 63, Appl
994 25 59.5 401 11 US-11-079-463-7895 Sequence 7895, Ap
995 25 59.5 403 9 US-10-467-657-7066 Sequence 7066, Ap
996 25 59.5 406 9 US-10-493-909-68 Sequence 68, Appl
997 25 59.5 406 11 US-11-107-028-7 Sequence 7, Appl1
998 25 59.5 406 11 US-11-264-627-2 Sequence 2, Appl1
999 25 59.5 408 11 US-11-188-298-19509 Sequence 19509, A
1000 25 59.5 409 9 US-10-506-454-334 Sequence 334, App
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-1713
; Sequence 1713, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1713
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1713

Query Match      100.0%; Score 42; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.041;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 2
US-10-530-061-1714
; Sequence 1714, Application US/10530061
```

```
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1714
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1714

Query Match      100.0%; Score 42; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.041;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 LLMGTLGIV 9
      |||||
Db      4 LLMGTLGIV 12
```

```
RESULT 3
US-10-530-061-1715
; Sequence 1715, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1715
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1715

Query Match      100.0%; Score 42; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.041;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 4
US-10-511-814-8
; Sequence 8, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
```



```
APPLICANT: Westbrook, III, Thomas F.
TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
FILE REFERENCE: 21108.0016U2
CURRENT APPLICATION NUMBER: US/10/511.814
CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US03/12867
PRIOR FILING DATE: 2003-04-21
PRIOR APPLICATION NUMBER: 60/374,245
PRIOR FILING DATE: 2002-04-19
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO: 8
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-8
```

```
Query Match          100.0%; Score 42; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 LMGTLGIV 9
        |||||
Db      82 LMGTLGIV 90
```

```
RESULT 5
US-10-511-814-11
Sequence 11, Application US/10511814
Publication No. US20060088472A1
GENERAL INFORMATION:
APPLICANT: Westbrook, III, Thomas F.
TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
FILE REFERENCE: 21108.0016U2
CURRENT APPLICATION NUMBER: US/10/511.814
CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US03/12867
PRIOR FILING DATE: 2003-04-21
PRIOR APPLICATION NUMBER: 60/374,245
PRIOR FILING DATE: 2002-04-19
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO: 11
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note =
US-10-511-814-11
```

```
Query Match          100.0%; Score 42; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 LMGTLGIV 9
        |||||
Db      82 LMGTLGIV 90
```

```
RESULT 6
US-10-530-253-14
Sequence 14, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasecti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
```

```
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530.253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO: 14
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-14
```

```
Query Match          100.0%; Score 42; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1 LMGTLGIV 9
        |||||
Db      82 LMGTLGIV 90
```

```
RESULT 7
US-11-179-478-4
Sequence 4, Application US/11179478
Publication No. US20050249745A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
TITLE OF INVENTION: FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSER: FOLEY & LARNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/179,478
FILING DATE: 13-JULY-2005
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Sandercoc, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-11-179-478-4
```

```
Query Match          100.0%; Score 42; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.31;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 LLMGTGIV 9
| | | | |
Db 82 LLMGTGIV 90

RESULT 8
US-10-530-253-1
; Sequence 1, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-1

Query Match 100.0%; Score 42; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.84;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
| | | | |
Db 232 LLMGTGIV 240

RESULT 9
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 42; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.84;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
| | | | |
Db 232 LLMGTGIV 240

RESULT 10
US-10-530-253-5
; Sequence 5, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match 100.0%; Score 42; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.84;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
| | | | |
Db 232 LLMGTGIV 240

RESULT 11
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7

Query Match 100.0%; Score 42; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.84;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
| | | | |
Db 82 LLMGTGIV 90

RESULT 12
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1

```

; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530.253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9

Query Match          100.0%; Score 42; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.84;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 82 LLMGTLGIV 90

RESULT 13
US-10-530-253-11
; Sequence 11, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530.253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-11

Query Match          100.0%; Score 42; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.84;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 82 LLMGTLGIV 90

RESULT 14
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PIANG, XIOMU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
```

```

; CURRENT APPLICATION NUMBER: US/11/192,923A
; CURRENT FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match          100.0%; Score 42; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.87;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 82 LLMGTLGIV 90

RESULT 15
US-10-530-253-30
; Sequence 30, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530.253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus type 35
US-10-530-253-30

Query Match          90.5%; Score 38; DB 9; Length 99;
Best Local Similarity 88.9%; Pred. No. 1.8;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTLGIV 9
Db 83 LLMGTLGIV 91

RESULT 16
US-10-530-061-1722
; Sequence 1722, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530.061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
```

;; PRIOR APPLICATION NUMBER: 60/417,269
;; PRIOR FILING DATE: 2002-10-08
;; NUMBER OF SEQ ID NOS: 2503
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 1722
;; LENGTH: 15
;; TYPE: PRT
;; ORGANISM: Human papillomavirus
US-10-530-061-1722

Query Match 81.0%; Score 34; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 1.4;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||: |||
Db 7 LMGSGIV 15

RESULT 17
US-10-530-061-1723
; Sequence 1723, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/W-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: 60/417,269
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1723
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1723

Query Match 81.0%; Score 34; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 1.4;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||: |||
Db 2 LMGSGIV 10

RESULT 18
US-10-530-253-28
; Sequence 28, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1

;; SEQ ID NO 28
;; LENGTH: 98
;; TYPE: PRT
;; ORGANISM: Human papillomavirus type 31
US-10-530-253-28

Query Match 81.0%; Score 34; DB 9; Length 98;
Best Local Similarity 77.8%; Pred. No. 1.1;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||: |||
Db 82 LMGSGIV 90

RESULT 19
US-10-530-061-1725
; Sequence 1725, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/W-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1725
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1725

Query Match 78.6%; Score 33; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 2.2;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||: |||
Db 7 LMGTVIV 15

RESULT 20
US-10-530-061-1726
; Sequence 1726, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/W-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1726
; LENGTH: 15
; TYPE: PRT

ORGANISM: Human papillomavirus
US-10-530-061-1726

Query Match 78.6%; Score 33; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 2.2;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||:|
Db 4 LLMGTNIV 12

RESULT 21
US-10-530-061-1727
; Sequence 1727, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SETTE, ALESSANDRO
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.03US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1727
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1727

Query Match 78.6%; Score 33; DB 9; Length 15;
Best Local Similarity 77.8%; Pred. No. 2.2;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||:|
Db 2 LLMGTNIV 10

RESULT 22
US-10-530-253-29
; Sequence 29, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100A137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 29
; LENGTH: 97
; TYPE: PRT
; ORGANISM: Human papillomavirus type 33
US-10-530-253-29

Query Match 78.6%; Score 33; DB 9; Length 97;

Best Local Similarity 77.8%; Pred. No. 16;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||:|
Db 82 LLMGTNIV 90

RESULT 23
US-11-106-399-10
; Sequence 10, Application US/11106399
; Publication No. US20060002892A1
; GENERAL INFORMATION:
; APPLICANT: MATHEW, FORUNELLOR A.
; APPLICANT: BOLES, KENT S.
; TITLE OF INVENTION: LLT USES THEREOF IN IMMUNE SYSTEM MODULATION
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/11/106,399
; PRIOR FILING DATE: 2005-04-14
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 179
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-106-399-10

Query Match 78.6%; Score 33; DB 11; Length 179;
Best Local Similarity 66.7%; Pred. No. 31;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||:|
Db 11 LISGTLGI 19

RESULT 24
US-11-087-099-7391
; Sequence 7391, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 7391
; LENGTH: 169
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(169)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-087-099-7391

Query Match 76.2%; Score 32; DB 11; Length 169;
Best Local Similarity 77.8%; Pred. No. 46;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
|||:|
Db 149 LLMGSLGSV 157

RESULT 25
US-11-188-298-9309
; Sequence 9309, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT

FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 9309
LENGTH: 313
TYPE: PRT
ORGANISM: *Synechococcus* sp. WH 8103
US-11-188-298-9309

Query Match 76.2%; Score 32; DB 11; Length 313;
Best Local Similarity 87.5%; Pred. No. 89;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 8
Db 40 LLMGQLGI 47

RESULT 26
US-11-203-251A-101
Sequence 101, Application US/11203251A
Publication No. US2006003904A1
GENERAL INFORMATION:
APPLICANT: Medimmune Inc.
TITLE OF INVENTION: EPH RECEPTOR FC VARIANTS WITH ENHANCED ANTIBODY DEPENDENT
TITLE OF INVENTION: CELL-MEDIATED CYTOTOXICITY ACTIVITY
FILE REFERENCE: AE702US
CURRENT APPLICATION NUMBER: US/11/203,251A
CURRENT FILING DATE: 2005-08-15
PRIOR APPLICATION NUMBER: 60/601,634
PRIOR FILING DATE: 2004-08-16
PRIOR APPLICATION NUMBER: 60/608,852
PRIOR FILING DATE: 2004-09-13
NUMBER OF SEQ ID NOS: 101
SOFTWARE: Patentin version 3.3
SEQ ID NO 101
LENGTH: 340
TYPE: PRT
ORGANISM: *Homo sapiens*
US-11-203-251A-101

Query Match 76.2%; Score 32; DB 11; Length 340;
Best Local Similarity 66.7%; Pred. No. 98;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 9
Db 17 LLLGVILGV 25

RESULT 27
US-11-188-298-7288
Sequence 7288, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 7288
LENGTH: 417
TYPE: PRT
ORGANISM: *Coxiella burnetii* RSA 493
US-11-188-298-7288

Query Match 76.2%; Score 32; DB 11; Length 417;

Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 1 LLMGTGIV 9
Db 305 MLGALGI 313

RESULT 28
US-11-188-298-1021
Sequence 1021, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 1021
LENGTH: 473
TYPE: PRT
ORGANISM: *Prochlorococcus marinus* str. MIT 9313
US-11-188-298-1021

Query Match 76.2%; Score 32; DB 11; Length 473;
Best Local Similarity 87.5%; Pred. No. 1.4e+02;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 8
Db 200 LLMGQLGI 207

RESULT 29
US-11-188-298-4129
Sequence 4129, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 4129
LENGTH: 473
TYPE: PRT
ORGANISM: *SYNECHOCOCCUS* SP. WH 8102
US-11-188-298-4129

Query Match 76.2%; Score 32; DB 11; Length 473;
Best Local Similarity 87.5%; Pred. No. 1.4e+02;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTGIV 8
Db 200 LLMGQLGI 207

RESULT 30
US-11-045-004-854
Sequence 854, Application US/11045004
Publication No. US20060078901A1
GENERAL INFORMATION:
APPLICANT: BUCHRIESEN, CARMEN
APPLICANT: FRANGEUL, LIONEL
APPLICANT: COUVE, ELISABETH
APPLICANT: RUSNIOK, CHRISTOPHE

```
APPLICANT: FSIHI, HARIDA
APPLICANT: DEHOUX, PIERRE
APPLICANT: DUSSENET, OLIVIER
APPLICANT: CHETOUANI, FARID
APPLICANT: NEDJARI, HAFED
APPLICANT: GLASER, PHILIPPE
APPLICANT: KUNST, FRANK
APPLICANT: COSSART, PASCALE
APPLICANT: DANIELS, JUSTIN
APPLICANT: GOEBEL, WERNER
APPLICANT: KREFT, JURGEN
APPLICANT: KUNH, MICHAEL
APPLICANT: NG, EVA
APPLICANT: VAZQUEZ-BOLAND, ANTONIO
APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
APPLICANT: GARRIDO-GARCIA, PATRICIA
APPLICANT: TERRERZ-MARTINEZ, ALBERTO
APPLICANT: AMEND, ALEXANDRA
APPLICANT: CHAKRABORTY, TRINAD
APPLICANT: DOMANN, EUGEN
APPLICANT: HAIN, THORSTEN
APPLICANT: BERCHE, PATRICK
APPLICANT: CHARBIT, ALAIN
APPLICANT: DURANT, LIONEL
APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
APPLICANT: BAQUERO, FERNANDO
APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
APPLICANT: GOMEZ-LOPEZ, NURIA
APPLICANT: MADUENIO, ENCARN
APPLICANT: PABLOS, BETRIZ DE
APPLICANT: MEHLAND, JURGEN
APPLICANT: KARST, UWE
APPLICANT: ENTIAN, KARL-DIETER
APPLICANT: HAUP, JORG
APPLICANT: ROSE, MATTHIAS
APPLICANT: VOSS, HAMUT
APPLICANT: TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
FILE REFERENCE: 05394.0018-02
CURRENT APPLICATION NUMBER: US/11/045,004
CURRENT FILING DATE: 2005-01-28
PRIOR APPLICATION NUMBER: 10/637,657
PRIOR FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: 10/257,023
PRIOR FILING DATE: 2002-10-08
PRIOR APPLICATION NUMBER: PCT/FR01/01118
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: FR 00/04,629
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 2854
SOFTWARE: PatentIn version 3.3
SEQ ID NO 854
LENGTH: 482
TYPE: PRT
ORGANISM: Listeria monocytogenes
US-11-045-004-854

Query Match
Best Local Similarity 76.2%; Score 32; DB 11; Length 482;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
DB 11 LLLGALGIV 19

RESULT 31
US-11-188-298-11785
Sequence 11785, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 11785
LENGTH: 637
TYPE: PRT
ORGANISM: Agrobacterium tumefaciens str. C58
US-11-188-298-11785

Query Match
Best Local Similarity 76.2%; Score 32; DB 11; Length 637;
Matches 5; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
DB 21 LLLGSLGIV 29

RESULT 32
US-11-188-298-10117
Sequence 10117, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 10117
LENGTH: 638
TYPE: PRT
ORGANISM: Agrobacterium tumefaciens str. C58
US-11-188-298-10117

Query Match
Best Local Similarity 76.2%; Score 32; DB 11; Length 638;
Matches 5; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
DB 22 LLLGSLGIV 30

RESULT 33
US-11-188-298-13016
Sequence 13016, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 13016
LENGTH: 197
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa UCBP-Pa14
US-11-188-298-13016

Query Match
Best Local Similarity 73.8%; Score 31; DB 11; Length 197;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
```

```
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 11785
LENGTH: 637
TYPE: PRT
ORGANISM: Agrobacterium tumefaciens str. C58
US-11-188-298-11785

Query Match
Best Local Similarity 76.2%; Score 32; DB 11; Length 637;
Matches 5; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
DB 21 LLLGSLGIV 29

RESULT 32
US-11-188-298-10117
Sequence 10117, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 10117
LENGTH: 638
TYPE: PRT
ORGANISM: Agrobacterium tumefaciens str. C58
US-11-188-298-10117

Query Match
Best Local Similarity 76.2%; Score 32; DB 11; Length 638;
Matches 5; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
DB 22 LLLGSLGIV 30

RESULT 33
US-11-188-298-13016
Sequence 13016, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 13016
LENGTH: 197
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa UCBP-Pa14
US-11-188-298-13016

Query Match
Best Local Similarity 73.8%; Score 31; DB 11; Length 197;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 LLMGTIGIV 9
||:|:|:|
```

Db 84 LILGANGIV 92

```
RESULT 34
US-11-045-004-2568
; Sequence 2568, Application US/11045004
; Publication No. US20060078901A1
; GENERAL INFORMATION:
; APPLICANT: BUCHRIEGER, CARMEN
; APPLICANT: FRANGEUL, LIONEL
; APPLICANT: COUVE, ELISABETH
; APPLICANT: RUSNIOK, CHRISTOPHE
; APPLICANT: FSIHI, HAFIDA
; APPLICANT: DEHOUX, PIERRE
; APPLICANT: DUSSURGET, OLIVIER
; APPLICANT: CHETOUANI, FARID
; APPLICANT: NEDJARI, HAFED
; APPLICANT: GLASER, PHILIPPE
; APPLICANT: KUNST, FRANCK
; APPLICANT: COSSART, PASCALE
; APPLICANT: DANIELS, JUSTIN
; APPLICANT: GOEBEL, WERNER
; APPLICANT: KREFT, JURGEN
; APPLICANT: KUHN, MICHAEL
; APPLICANT: NG, EVA
; APPLICANT: VAZQUEZ-BOLAND, ANTONIO
; APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
; APPLICANT: GARRIDO-GARCIA, PATRICIA
; APPLICANT: TIERREZ-MARTINEZ, ALBERTO
; APPLICANT: AMEND, ALEXANDRA
; APPLICANT: CHAKRABORTY, TRINAD
; APPLICANT: DOMANN, EUGEN
; APPLICANT: HAIN, THORSTEN
; APPLICANT: BERCHE, PATRICK
; APPLICANT: CHARBIT, ALAIN
; APPLICANT: DURANT, LIONEL
; APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
; APPLICANT: BAQUERO, FERNANDO
; APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
; APPLICANT: GOMEZ-LOPEZ, NURIA
; APPLICANT: MADUENIO, ENCARNIA
; APPLICANT: PABLOS, BETRIZ DE
; APPLICANT: WEHLAND, JURGEN
; APPLICANT: KARST, UWE
; APPLICANT: ENTIAN, KARL-DIETER
; APPLICANT: HAUF, JORG
; APPLICANT: ROSE, MATTHIAS
; APPLICANT: VOSS, HAMUT
; TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
; FILE REFERENCE: 05394.0018-02
; CURRENT APPLICATION NUMBER: US/11/045,004
; PRIOR FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: 10/637,657
; PRIOR FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: 10/257,023
; PRIOR FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: PCT/FR01/01118
; PRIOR FILING DATE: 2001-04-11
; PRIOR APPLICATION NUMBER: FR 00/04,629
; PRIOR FILING DATE: 2000-04-11
; NUMBER OF SEQ ID NOS: 2854
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 2568
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Listeria monocytogenes
US-11-045-004-2568
```

```
Query Match 73.8%; Score 31; DB 11; Length 253;
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 LLMGTIG 7

Db 163 LILGTLG 169

```
RESULT 35
US-11-188-298-12413
; Sequence 12413, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 12413
; LENGTH: 327
; TYPE: PRT
; ORGANISM: Trichodesmium erythraeum IMS101
US-11-188-298-12413
```

```
Query Match 73.8%; Score 31; DB 11; Length 327;
Best Local Similarity 62.5%; Pred. No. 1.5e+02;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 LLMGTIGI 8
Db 137 LILGTLGL 144
```

```
RESULT 36
US-11-045-004-437
; Sequence 437, Application US/11045004
; Publication No. US20060078901A1
; GENERAL INFORMATION:
; APPLICANT: BUCHRIEGER, CARMEN
; APPLICANT: FRANGEUL, LIONEL
; APPLICANT: COUVE, ELISABETH
; APPLICANT: RUSNIOK, CHRISTOPHE
; APPLICANT: FSIHI, HAFIDA
; APPLICANT: DEHOUX, PIERRE
; APPLICANT: DUSSURGET, OLIVIER
; APPLICANT: CHETOUANI, FARID
; APPLICANT: NEDJARI, HAFED
; APPLICANT: GLASER, PHILIPPE
; APPLICANT: KUNST, FRANCK
; APPLICANT: COSSART, PASCALE
; APPLICANT: DANIELS, JUSTIN
; APPLICANT: GOEBEL, WERNER
; APPLICANT: KREFT, JURGEN
; APPLICANT: KUHN, MICHAEL
; APPLICANT: NG, EVA
; APPLICANT: VAZQUEZ-BOLAND, ANTONIO
; APPLICANT: DOMINGUEZ-BERNAL, GUSTAVO
; APPLICANT: GARRIDO-GARCIA, PATRICIA
; APPLICANT: TIERREZ-MARTINEZ, ALBERTO
; APPLICANT: AMEND, ALEXANDRA
; APPLICANT: CHAKRABORTY, TRINAD
; APPLICANT: DOMANN, EUGEN
; APPLICANT: HAIN, THORSTEN
; APPLICANT: BERCHE, PATRICK
; APPLICANT: CHARBIT, ALAIN
; APPLICANT: DURANT, LIONEL
; APPLICANT: PEREZ-DIAZ, JOSE-CLAUDIO
; APPLICANT: BAQUERO, FERNANDO
; APPLICANT: GARCIA DEL PORTILLO, FRANCISCO
; APPLICANT: GOMEZ-LOPEZ, NURIA
; APPLICANT: MADUENIO, ENCARNIA
; APPLICANT: PABLOS, BETRIZ DE
; APPLICANT: WEHLAND, JURGEN
; APPLICANT: KARST, UWE
```



```
APPLICANT: ENTIAN, KARL-DIETER
APPLICANT: HAUF, JORG
APPLICANT: ROSE, MATTHIAS
APPLICANT: VOSS, HAMUT
TITLE OF INVENTION: LISTERIA MONOCYTOGENES GENOME, POLYPEPTIDES AND USES
FILE REFERENCE: 05394.0018-02
CURRENT FILING DATE: US/11/045.004
PRIOR FILING DATE: 2005-01-28
PRIOR FILING DATE: 10/637,657
PRIOR FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: 10/257,023
PRIOR FILING DATE: 2002-10-08
PRIOR APPLICATION NUMBER: PCT/FR01/01118
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: FR 00/04,629
PRIOR FILING DATE: 2000-04-11
NUMBER OF SEQ ID NOS: 2854
SOFTWARE: PatentIn version 3.3
SEQ ID NO: 437
LENGTH: 353
TYPE: PRT
ORGANISM: Listeria monocytogenes
US-11-045-004-437
```

```
Query Match 73.8%; Score 31; DB 11; Length 353;
Best Local Similarity 75.0%; Pred. No. 1.6e+02;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTLGI 8
Db 245 LLMGVSIGI 252
```

RESULT 37

```
US-11-072-512-2399
Sequence 2399, Application US/11072512
Publication No. US20060029945A1
GENERAL INFORMATION:
```

```
APPLICANT: ISOGAI, TAKAO
APPLICANT: SUGIYAMA, TOMOYASU
APPLICANT: OTSUKI, TETSUJI
APPLICANT: MAKAMATSU, AI
APPLICANT: SATO, HIROYUKI
APPLICANT: ISHII, SHIZUKO
APPLICANT: YAMAMOTO, JUN-ICHI
APPLICANT: ISONO, YUUKO
APPLICANT: HIO, YORI
APPLICANT: OTSUKA, KAORU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: SEKI, NAOHICO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTYOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: Novel full length cDNA
FILE REFERENCE: 064335-0191
CURRENT FILING DATE: US/11/072,512
CURRENT FILING DATE: 2005-03-07
PRIOR APPLICATION NUMBER: US 60/350,978
PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: JP 2001-379298
PRIOR FILING DATE: 2001-11-05
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 2399
LENGTH: 413
TYPE: PRT
ORGANISM: Homo sapiens
US-11-072-512-2399
```

```
Query Match 73.8%; Score 31; DB 11; Length 413;
```

```
Best Local Similarity 75.0%; Pred. No. 1.9e+02;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTIGI 8
Db 210 LLMGTLGV 217
```

RESULT 38

```
US-11-188-298-5239
Sequence 5239, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT FILING DATE: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO: 5239
LENGTH: 422
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa PAO1
US-11-188-298-5239
```

```
Query Match 73.8%; Score 31; DB 11; Length 422;
Best Local Similarity 66.7%; Pred. No. 1.9e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTIGIV 9
Db 309 LLMGAVGIV 317
```

RESULT 39

```
US-11-188-298-6306
Sequence 6306, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT FILING DATE: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO: 6306
LENGTH: 625
TYPE: PRT
ORGANISM: Thermosynechococcus elongatus BP-1
US-11-188-298-6306
```

```
Query Match 73.8%; Score 31; DB 11; Length 625;
Best Local Similarity 55.6%; Pred. No. 2.9e+02;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy 1 LLMGTIGIV 9
Db 14 LLMGALGV 22
```

RESULT 40

```
US-10-530-061-1721
Sequence 1721, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
```

```
FILE REFERENCE: 2060.033US02/EXS/M-M
CURRENT APPLICATION NUMBER: US/10/530.061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1721
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1721

Query Match      71.4%; Score 30; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 8.2;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      1 LLMGTLGI 8
      |||||: ||
Db      8 LLMGSLGI 15

RESULT 41
US-10-530-253-40
Sequence 40, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530.253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 40
LENGTH: 104
TYPE: PRT
ORGANISM: Human papillomavirus
FEATURE:
NAME/KEY: MISC_FEATURE
LOCATION: (1)-(104)
OTHER INFORMATION: where Xaa is any amino acid
US-10-530-253-40

Query Match      71.4%; Score 30; DB 9; Length 104;
Best Local Similarity 77.8%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 LLMGTLGIV 9
      |||||: |
Db      88 LLMGTLKXV 96

RESULT 42
US-11-079-463-6262
Sequence 6262, Application US/11079463
Publication No. US20060073161A1
GENERAL INFORMATION:
APPLICANT: Gary L. Breton
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTERIOIDES FR
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: PAT00-03DIV2
```

```
CURRENT APPLICATION NUMBER: US/11/079,463
CURRENT FILING DATE: 2005-03-14
PRIOR APPLICATION NUMBER: US 60/128,705
PRIOR FILING DATE: 1999-04-09
PRIOR APPLICATION NUMBER: US 09/540,209
PRIOR FILING DATE: 2000-04-04
NUMBER OF SEQ ID NOS: 10444
SEQ ID NO 6262
LENGTH: 205
TYPE: PRT
ORGANISM: B.fragilis
US-11-079-463-6262

Query Match      71.4%; Score 30; DB 11; Length 205;
Best Local Similarity 66.7%; Pred. No. 1.4e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 LLMGTLGIV 9
      |||||: |
Db      28 LLMGKLGL 36

RESULT 43
US-10-506-454-1358
Sequence 1358, Application US/10506454
Publication No. US20060068386A1
GENERAL INFORMATION:
APPLICANT: Slesarev, Alexi I
APPLICANT: Mezhevaya, Katja V
APPLICANT: Poluehin, Nikolai N
APPLICANT: Shcherbinina, Olga V
APPLICANT: Shakhova, Vera V
APPLICANT: Mal'kh, Andrei G
APPLICANT: Koz'yavkin, Sergei A
TITLE OF INVENTION: The Complete Genome and Protein Sequences of the Hyperthermophil
TITLE OF INVENTION: Methanopyrus Kandleri AV19 and Monophyly of Archaeal Methanogens
FILE REFERENCE: FID001
CURRENT APPLICATION NUMBER: US/10/506,454
CURRENT FILING DATE: 2004-08-31
PRIOR APPLICATION NUMBER: PCT/US03/06664
PRIOR FILING DATE: 2003-03-04
PRIOR APPLICATION NUMBER: 60/361,742
PRIOR FILING DATE: 2002-03-04
NUMBER OF SEQ ID NOS: 1722
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1358
LENGTH: 242
TYPE: PRT
ORGANISM: Methanopyrus kandleri
US-10-506-454-1358

Query Match      71.4%; Score 30; DB 9; Length 242;
Best Local Similarity 66.7%; Pred. No. 1.6e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      1 LLMGTLGIV 9
      |||||: |
Db      111 LLMGTLGLV 119

RESULT 44
US-11-188-298-11179
Sequence 11179, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
```

```
/ NUMBER OF SEQ ID NOS: 22569
/ SEQ ID NO 11179
/ LENGTH: 370
/ TYPE: PRT
/ ORGANISM: ASPERGILLUS NIDULANS FGSC A4
US-11-188-298-11179

Query Match
Best Local Similarity 71.4%; Score 30; DB 11; Length 370;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 2 LMGTGIV 9
|:||||:
Db 262 LIGTIGVL 269

RESULT 45
US-11-087-099-5578
/ Sequence 5578, Application US/11087099
/ Publication No. US20060041961A1
/ GENERAL INFORMATION:
/ APPLICANT: Abad, Mark S. et al.
/ TITLE OF INVENTION: Genes and Uses for Plant Improvement
/ FILE REFERENCE: 38-21(53450)B EP
/ CURRENT APPLICATION NUMBER: US/11/087,099
/ CURRENT FILING DATE: 2005-03-22
/ NUMBER OF SEQ ID NOS: 12464
/ SEQ ID NO 5578
/ LENGTH: 371
/ TYPE: PRT
/ ORGANISM: Aspergillus niger
US-11-087-099-5578

Query Match
Best Local Similarity 71.4%; Score 30; DB 11; Length 371;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 2 LMGTGIV 9
|:||||:
Db 263 LIGTIGVL 270

RESULT 46
US-11-188-298-16133
/ Sequence 16133, Application US/11188298
/ Publication No. US20060075522A1
/ GENERAL INFORMATION:
/ APPLICANT: Abad, Mark S. et al.
/ TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
/ FILE REFERENCE: 38-21(53452)B
/ CURRENT APPLICATION NUMBER: US/11/188,298
/ CURRENT FILING DATE: 2005-07-22
/ PRIOR APPLICATION NUMBER: 60/592,978
/ PRIOR FILING DATE: 2004-07-31
/ NUMBER OF SEQ ID NOS: 22569
/ SEQ ID NO 16133
/ LENGTH: 371
/ TYPE: PRT
/ ORGANISM: Aspergillus niger
US-11-188-298-16133

Query Match
Best Local Similarity 71.4%; Score 30; DB 11; Length 371;
Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 2 LMGTGIV 9
|:||||:
Db 263 LIGTIGVL 270

RESULT 47
US-11-079-463-8893
/ Sequence 8893, Application US/11079463

/ Publication No. US20060073161A1
/ GENERAL INFORMATION:
/ APPLICANT: Gary L. Breton
/ TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTEROIDES FR
/ FILE REFERENCE: PATH00-03DIY2
/ CURRENT APPLICATION NUMBER: US/11/079,463
/ CURRENT FILING DATE: 2005-03-14
/ PRIOR APPLICATION NUMBER: US 60/128,705
/ PRIOR FILING DATE: 1999-04-09
/ PRIOR APPLICATION NUMBER: US 09/540,209
/ PRIOR FILING DATE: 2000-04-04
/ NUMBER OF SEQ ID NOS: 10444
/ SEQ ID NO 8893
/ LENGTH: 437
/ TYPE: PRT
/ ORGANISM: B.fragilis
US-11-079-463-8893

Query Match
Best Local Similarity 71.4%; Score 30; DB 11; Length 437;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 LMGTGIV 9
|:||||:
Db 278 LIGTIGIT 286

RESULT 48
US-11-079-463-6055
/ Sequence 6055, Application US/11079463
/ Publication No. US20060073161A1
/ GENERAL INFORMATION:
/ APPLICANT: Gary L. Breton
/ TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTEROIDES FR
/ FILE REFERENCE: PATH00-03DIY2
/ CURRENT APPLICATION NUMBER: US/11/079,463
/ CURRENT FILING DATE: 2005-03-14
/ PRIOR APPLICATION NUMBER: US 60/128,705
/ PRIOR FILING DATE: 1999-04-09
/ PRIOR APPLICATION NUMBER: US 09/540,209
/ PRIOR FILING DATE: 2000-04-04
/ NUMBER OF SEQ ID NOS: 10444
/ SEQ ID NO 6055
/ LENGTH: 540
/ TYPE: PRT
/ ORGANISM: B.fragilis
US-11-079-463-6055

Query Match
Best Local Similarity 71.4%; Score 30; DB 11; Length 540;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 LMGTGIV 8
|:||||:
Db 495 VLMGALGI 502

RESULT 49
US-11-188-298-17174
/ Sequence 17174, Application US/11188298
/ Publication No. US20060075522A1
/ GENERAL INFORMATION:
/ APPLICANT: Abad, Mark S. et al.
/ TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
/ FILE REFERENCE: 38-21(53452)B
/ CURRENT APPLICATION NUMBER: US/11/188,298
/ CURRENT FILING DATE: 2005-07-22
/ PRIOR APPLICATION NUMBER: 60/592,978
/ PRIOR FILING DATE: 2004-07-31
/ NUMBER OF SEQ ID NOS: 22569
/ SEQ ID NO 17174
```

```
; LENGTH: 554
; TYPE: PRT
; ORGANISM: Bdellovibrio bacteriovorus
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(554)
; OTHER INFORMATION: unsure at all Xaa locations
US-11-188-298-17174
```

```
Query Match          71.4%; Score 30; DB 11; Length 554;
Best Local Similarity 55.6%; Pred. No. 4e+02;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 LLMGTLAGIV 9
         |::|||::|
Db       13 LITAGLV 21
```

```
RESULT 50
US-11-188-298-15243
; Sequence 15243, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 15243
; LENGTH: 651
; TYPE: PRT
; ORGANISM: Brucella melitensis 16M
US-11-188-298-15243
```

```
Query Match          71.4%; Score 30; DB 11; Length 651;
Best Local Similarity 55.6%; Pred. No. 4.8e+02;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 LLMGTLAGIV 9
         |::|||::|
Db       41 LVLGALGV 49
```

```
Search completed: May 5, 2006, 07:45:43
Job time : 20.4 secs
```

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 04:48:55 ; Search time 20.7 Seconds
(without alignments)
35.946 Million cell updates/sec

Title: US-08-170-344-19
Perfect score: 49
Sequence: 1 GTIGIVCP1 9

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database :
1: /cgn2_6/ptodata/1/1aa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/6_COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/H_COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/PCrus_COMB.pep:*
5: /cgn2_6/ptodata/1/1aa/RE_COMB.pep:*
6: /cgn2_6/ptodata/1/1aa/backfiles.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	49	100.0	9	2	US-09-169-425C-21
2	49	100.0	9	2	US-08-197-484-70
3	49	100.0	9	2	US-09-759-960-21
4	49	100.0	9	2	US-10-365-908-50
5	49	100.0	9	4	PCR-US95-02121-70
6	49	100.0	10	2	US-09-000-003A-9
7	49	100.0	10	2	US-09-405-986A-10
8	49	100.0	10	2	US-10-365-908-46
9	49	100.0	11	2	US-09-169-425C-31
10	49	100.0	11	2	US-09-169-425C-33
11	49	100.0	11	2	US-09-759-960-31
12	49	100.0	11	2	US-09-759-960-33
13	49	100.0	12	2	US-08-948-378A-16
14	49	100.0	12	2	US-09-169-425C-16
15	49	100.0	12	2	US-08-948-378A-3
16	49	100.0	13	2	US-08-948-378A-4
17	49	100.0	13	2	US-08-948-378A-19
18	49	100.0	13	2	US-08-159-339A-1167
19	49	100.0	13	2	US-09-169-425C-3
20	49	100.0	13	2	US-09-169-425C-4
21	49	100.0	13	2	US-09-169-425C-19
22	49	100.0	13	2	US-09-759-960-3
23	49	100.0	13	2	US-09-759-960-4
24	49	100.0	13	2	US-09-759-960-19
25	49	100.0	14	2	US-09-169-425C-32
26	49	100.0	14	2	US-09-759-960-32
27	49	100.0	14	2	US-09-759-960-32

28	49	100.0	15	2	US-08-159-339A-1168	Sequence 1168, Ap
29	49	100.0	16	2	US-09-169-425C-25	Sequence 25, Appl
30	49	100.0	16	2	US-09-759-960-25	Sequence 25, Appl
31	49	100.0	19	2	US-09-980-523A-18	Sequence 18, Appl
32	49	100.0	20	2	US-08-075-541D-50	Sequence 50, Appl
33	49	100.0	21	1	US-08-934-915-50	Sequence 50, Appl
34	49	100.0	21	1	US-08-934-915-157	Sequence 157, Appl
35	49	100.0	21	2	US-09-980-177A-76	Sequence 76, Appl
36	49	100.0	21	2	US-08-075-541D-40	Sequence 40, Appl
37	49	100.0	28	2	US-09-486-194-5	Sequence 5, Appl
38	49	100.0	30	1	US-08-934-915-54	Sequence 54, Appl
39	49	100.0	38	2	US-08-948-178A-6	Sequence 6, Appl
40	49	100.0	38	2	US-09-169-425C-6	Sequence 6, Appl
41	49	100.0	38	2	US-09-759-960-6	Sequence 6, Appl
42	49	100.0	98	1	US-08-406-248-6	Sequence 42, Appl
43	49	100.0	98	2	US-08-075-541D-42	Sequence 42, Appl
44	49	100.0	98	2	US-09-382-616A-1	Sequence 1, Appl
45	49	100.0	98	2	US-08-944-368A-4	Sequence 4, Appl
46	49	100.0	98	2	US-09-820-764-4	Sequence 4, Appl
47	49	100.0	98	2	US-09-613-303-8	Sequence 8, Appl
48	49	100.0	98	2	US-09-586-420-19	Sequence 19, Appl
49	49	100.0	98	2	US-09-986-118A-4	Sequence 4, Appl
50	49	100.0	98	2	US-09-728-466-1	Sequence 1, Appl
51	49	100.0	98	2	US-09-824-017-4	Sequence 4, Appl
52	49	100.0	98	2	US-10-267-311-8	Sequence 8, Appl
53	49	100.0	98	2	US-10-201-764-19	Sequence 19, Appl
54	49	100.0	98	2	US-09-637-746-3	Sequence 3, Appl
55	49	100.0	98	2	US-09-501-097A-7	Sequence 7, Appl
56	49	100.0	98	2	US-09-980-523A-12	Sequence 12, Appl
57	49	100.0	121	2	US-10-267-311-12	Sequence 12, Appl
58	49	100.0	172	2	US-08-860-165-14	Sequence 14, Appl
59	49	100.0	172	2	US-09-359-382-14	Sequence 14, Appl
60	49	100.0	185	2	US-09-462-993-2	Sequence 2, Appl
61	49	100.0	198	2	US-09-613-303-35	Sequence 35, Appl
62	49	100.0	198	2	US-10-267-311-35	Sequence 35, Appl
63	49	100.0	220	2	US-09-485-885-1	Sequence 1, Appl
64	49	100.0	220	2	US-09-485-885-8	Sequence 8, Appl
65	49	100.0	220	2	US-09-485-885-12	Sequence 12, Appl
66	49	100.0	233	1	US-08-459-818-10	Sequence 20, Appl
67	49	100.0	253	1	US-08-889-666-20	Sequence 20, Appl
68	49	100.0	253	1	US-08-465-078-20	Sequence 20, Appl
69	49	100.0	253	1	US-08-725-776-20	Sequence 20, Appl
70	49	100.0	253	1	US-08-488-062-20	Sequence 20, Appl
71	49	100.0	263	1	US-08-117-083-9	Sequence 9, Appl
72	49	100.0	266	2	US-08-860-165-10	Sequence 10, Appl
73	49	100.0	266	2	US-09-359-382-10	Sequence 10, Appl
74	49	100.0	266	2	US-09-367-309A-1	Sequence 1, Appl
75	49	100.0	287	2	US-09-613-303-33	Sequence 33, Appl
76	49	100.0	295	2	US-10-267-311-33	Sequence 33, Appl
77	49	100.0	324	2	US-09-613-303-25	Sequence 25, Appl
78	49	100.0	324	2	US-09-613-303-25	Sequence 25, Appl
79	49	100.0	324	2	US-10-267-311-25	Sequence 25, Appl
80	49	100.0	371	2	US-09-485-885-6	Sequence 6, Appl
81	49	100.0	390	2	US-09-485-885-14	Sequence 14, Appl
82	49	100.0	420	2	US-09-501-097A-22	Sequence 22, Appl
83	49	100.0	493	2	US-09-613-303-19	Sequence 19, Appl
84	49	100.0	493	2	US-10-267-311-19	Sequence 19, Appl
85	49	100.0	639	2	US-09-613-303-17	Sequence 17, Appl
86	49	100.0	639	2	US-10-267-311-17	Sequence 17, Appl
87	49	100.0	641	2	US-09-613-303-51	Sequence 51, Appl
88	49	100.0	641	2	US-10-267-311-51	Sequence 51, Appl
89	49	100.0	647	2	US-09-613-303-53	Sequence 53, Appl
90	49	100.0	647	2	US-10-267-311-53	Sequence 53, Appl
91	49	100.0	647	2	US-09-613-303-29	Sequence 29, Appl
92	49	100.0	648	2	US-10-267-311-29	Sequence 29, Appl
93	49	100.0	711	2	US-09-613-303-41	Sequence 41, Appl
94	49	100.0	711	2	US-10-267-311-41	Sequence 41, Appl
95	49	100.0	723	2	US-09-501-097A-20	Sequence 20, Appl
96	49	100.0	723	2	US-09-613-303-45	Sequence 45, Appl
97	49	100.0	724	2	US-10-267-311-45	Sequence 45, Appl
98	49	100.0	724	2	US-08-787-547-107	Sequence 107, Appl
99	49	87.8	8	1	US-09-169-425C-20	Sequence 20, Appl
100	49	87.8	8	2	US-09-169-425C-20	Sequence 20, Appl

101	43	87.8	8	2	US-08-704-344-21	Sequence 21, Appl	174	33.5	68.4	589	2	US-09-740-041-2	Sequence 2, Appl1
102	43	87.8	8	2	US-09-759-960-20	Sequence 20, Appl	175	33.5	68.4	850	2	US-09-915-181A-3	Sequence 3, Appl1
103	43	87.8	8	2	US-09-601-729-272	Sequence 272, App	176	33	67.3	159	2	US-09-270-767-45321	Sequence 45321, A
104	43	87.8	9	2	US-08-948-378A-2	Sequence 2, Appl1	177	33	67.3	370	2	US-09-134-000C-4746	Sequence 4746, Ap
105	43	87.8	9	2	US-09-169-425C-2	Sequence 2, Appl1	178	33	67.3	409	2	US-09-949-016-11411	Sequence 1141, A
106	43	87.8	9	2	US-09-169-425C-27	Sequence 27, Appl	179	33	67.3	412	2	US-09-285-055-2	Sequence 2, Appl1
107	43	87.8	9	2	US-08-197-484-68	Sequence 68, Appl	180	33	67.3	412	2	US-09-407-062-7	Sequence 7, Appl1
108	43	87.8	9	2	US-09-759-960-2	Sequence 2, Appl1	181	33	67.3	412	2	US-09-950-772-6	Sequence 6, Appl1
109	43	87.8	9	2	US-09-759-960-27	Sequence 27, Appl	182	33	67.3	412	2	US-10-045-063A-2	Sequence 2, Appl1
110	43	87.8	9	2	US-10-365-908-103	Sequence 103, App	183	33	67.3	418	2	US-09-107-532A-6073	Sequence 6073, Ap
111	43	87.8	9	4	PCT-US95-02121-68	Sequence 68, Appl	184	33	67.3	463	2	US-08-792-295-1	Sequence 1, Appl1
112	43	87.8	10	2	US-10-365-908-99	Sequence 99, Appl	185	33	67.3	463	2	US-09-076-432-1	Sequence 1, Appl1
113	43	87.8	36	2	US-09-000-094-30	Sequence 30, Appl	186	33	67.3	463	2	US-09-134-001C-3579	Sequence 3579, Ap
114	43	87.8	36	2	US-10-011-749-30	Sequence 30, Appl	187	33	67.3	802	2	US-09-634-955B-2	Sequence 2, Appl1
115	43	87.8	59	2	US-09-350-027-6	Sequence 6, Appl1	188	33	67.3	802	2	US-09-816-760-2	Sequence 2, Appl1
116	43	87.8	375	2	US-09-000-094-22	Sequence 22, Appl	189	33	67.3	802	2	US-09-838-561-2	Sequence 2, Appl1
117	43	87.8	375	2	US-10-011-749-22	Sequence 22, Appl	190	33	67.3	1014	2	US-09-344-510B-3	Sequence 3, Appl1
118	43	87.8	465	2	US-09-000-094-24	Sequence 24, Appl	191	33	67.3	1075	2	US-09-252-991A-1837	Sequence 1837, A
119	43	87.8	465	2	US-10-011-749-24	Sequence 24, Appl	192	32	65.3	9	2	US-10-365-908-74	Sequence 74, Appl
120	43	87.8	601	1	US-08-606-288-7	Sequence 7, Appl1	193	32	65.3	9	2	US-10-365-908-81	Sequence 81, Appl
121	43	87.8	601	1	US-08-606-288-10	Sequence 10, Appl	194	32	65.3	101	2	US-09-270-767-39735	Sequence 39735, A
122	43	87.8	601	2	US-09-347-483-7	Sequence 7, Appl1	195	32	65.3	101	2	US-09-270-767-54952	Sequence 54952, A
123	43	87.8	601	2	US-09-347-483-10	Sequence 10, Appl	196	32	65.3	128	2	US-09-134-000C-5387	Sequence 5387, Ap
124	43	87.8	1587	2	US-09-000-094-46	Sequence 46, Appl	197	32	65.3	133	2	US-09-270-767-44213	Sequence 44213, A
125	43	87.8	1587	2	US-10-011-749-46	Sequence 46, Appl	198	32	65.3	133	2	US-09-270-767-59636	Sequence 59636, A
126	39	79.6	78	2	US-09-134-001C-3871	Sequence 3871, Ap	199	32	65.3	160	2	US-09-328-352-5681	Sequence 5681, Ap
127	38	77.6	1	2	US-10-365-908-21	Sequence 21, Appl	200	32	65.3	196	2	US-09-270-767-33887	Sequence 33887, A
128	38	77.6	1	2	US-09-169-425C-28	Sequence 28, Appl	201	32	65.3	196	2	US-10-147-874-8	Sequence 8, Appl1
129	38	77.6	11	2	US-09-759-960-28	Sequence 28, Appl	202	32	65.3	205	2	US-09-270-767-44356	Sequence 44356, A
130	38	77.6	79	2	US-09-198-452A-1251	Sequence 1251, Ap	203	32	65.3	215	1	US-08-690-095-7	Sequence 7, Appl1
131	38	77.6	188	2	US-09-438-185A-1054	Sequence 1054, Ap	204	32	65.3	215	2	US-09-113-789-7	Sequence 16, Appl
132	38	77.6	1139	1	US-08-537-210A-4	Sequence 4, Appl1	205	32	65.3	215	2	US-08-543-246B-15	Sequence 22, Appl
133	38	77.6	1139	2	US-09-113-825-4	Sequence 4, Appl1	206	32	65.3	215	2	US-08-543-246B-22	Sequence 816, Ap
134	38	77.6	2703	1	US-08-185-432-19	Sequence 19, Appl	207	32	65.3	231	2	US-09-949-016-8815	Sequence 8815, Ap
135	38	77.6	2703	2	US-08-899-232-4	Sequence 4, Appl1	208	32	65.3	231	2	US-09-949-016-8816	Sequence 8816, Ap
136	38	77.6	2703	2	US-09-121-457-4	Sequence 9, Appl1	209	32	65.3	233	1	US-08-690-095-8	Sequence 8, Appl1
137	37	75.5	179	1	US-08-650-578-2	Sequence 2, Appl1	210	32	65.3	233	2	US-09-113-789-8	Sequence 8, Appl1
138	37	75.5	179	1	US-08-650-578-2	Sequence 3, Appl1	211	32	65.3	233	2	US-08-543-246B-21	Sequence 21, Appl
139	37	75.5	179	1	US-08-688-942-3	Sequence 3, Appl1	212	32	65.3	233	2	US-09-949-016-11591	Sequence 11591, A
140	37	75.5	179	1	US-09-113-788-3	Sequence 3, Appl1	213	32	65.3	249	2	US-09-949-016-11592	Sequence 11592, A
141	37	75.5	179	2	US-09-113-789-9	Sequence 9, Appl1	214	32	65.3	254	2	US-09-372-422A-34	Sequence 34, Appl
142	37	75.5	179	2	US-09-919-039-130	Sequence 130, Appl	215	32	65.3	274	2	US-09-489-039A-7855	Sequence 7855, Ap
143	37	75.5	179	2	US-09-949-016-6200	Sequence 6200, Ap	216	32	65.3	303	2	US-09-303-518D-690	Sequence 690, App
144	37	75.5	418	2	US-09-248-796A-20076	Sequence 20076, A	217	32	65.3	308	2	US-09-949-016-9880	Sequence 9880, App
145	37	75.5	418	2	US-09-711-164-412	Sequence 412, App	218	32	65.3	332	2	US-09-515-806-18	Sequence 18, Appl
146	37	75.5	465	2	US-09-915-181A-8	Sequence 8, Appl1	219	32	65.3	415	2	US-09-949-016-9946	Sequence 9946, Ap
147	37	75.5	2321	2	US-09-230-652-2	Sequence 26, Appl	220	32	65.3	415	2	US-09-949-016-9947	Sequence 9947, Ap
148	36	73.5	8	2	US-09-169-425C-26	Sequence 26, Appl	221	32	65.3	415	2	US-09-949-016-9948	Sequence 9948, Ap
149	36	73.5	8	2	US-09-759-960-26	Sequence 26, Appl	222	32	65.3	415	2	US-09-949-016-9949	Sequence 9949, Ap
150	35.5	72.4	204	2	US-10-104-047-2253	Sequence 2253, Ap	223	32	65.3	415	2	US-09-538-092-446	Sequence 446, App
151	35.5	72.4	560	1	US-08-647-484-2	Sequence 2, Appl1	224	32	65.3	440	2	US-09-538-092-446	Sequence 446, App
152	35.5	72.4	560	1	US-08-647-484-2	Sequence 2, Appl1	225	32	65.3	440	2	US-09-902-521A-10011	Sequence 10011, A
153	35.5	72.4	560	1	US-08-430-033A-2	Sequence 2, Appl1	226	32	65.3	446	1	US-08-833-610-5	Sequence 5, Appl1
154	35.5	72.4	560	1	US-08-805-118-4	Sequence 4, Appl1	227	32	65.3	446	1	US-08-834-033A-15	Sequence 15, Appl1
155	35.5	72.4	560	2	US-09-391-958-4	Sequence 4, Appl1	228	32	65.3	446	2	US-09-377-452-5	Sequence 5, Appl1
156	35.5	72.4	560	2	US-09-915-181A-5	Sequence 5, Appl1	229	32	65.3	447	2	US-09-555-093-7	Sequence 7, Appl1
157	35.5	72.4	560	4	PCT-US96-05792-2	Sequence 2, Appl1	230	32	65.3	448	1	US-08-566-779-5	Sequence 5, Appl1
158	35.5	72.4	567	2	US-09-949-016-11354	Sequence 11354, A	231	32	65.3	448	1	US-08-789-936-5	Sequence 5, Appl1
159	35.5	72.4	578	2	US-09-740-041-4	Sequence 4, Appl1	232	32	65.3	448	2	US-08-934-254-5	Sequence 5, Appl1
160	35.5	72.4	582	2	US-09-915-181A-4	Sequence 4, Appl1	233	32	65.3	448	2	US-09-685-775-5	Sequence 5, Appl1
161	35	71.4	152	2	US-09-605-703B-2168	Sequence 2168, Ap	234	32	65.3	448	2	US-09-857-581B-15	Sequence 15, Appl
162	35	71.4	162	2	US-09-248-796A-19741	Sequence 19741, A	235	32	65.3	448	2	US-09-857-524B-11	Sequence 11, Appl
163	35	71.4	718	2	US-09-252-991A-25683	Sequence 25683, A	236	32	65.3	452	2	US-08-934-254-27	Sequence 27, Appl
164	34	69.4	10	2	US-08-159-339A-572	Sequence 12, Appl	237	32	65.3	452	2	US-09-685-775-27	Sequence 27, Appl
165	34	69.4	115	2	US-10-365-908-12	Sequence 12, Appl	238	32	65.3	458	2	US-09-568-470A-1	Sequence 1, Appl1
166	34	69.4	115	2	US-09-270-767-44748	Sequence 44748, A	239	32	65.3	502	2	US-09-252-991A-23327	Sequence 23327, A
167	34	69.4	170	2	US-09-902-540-15981	Sequence 15981, A	240	32	65.3	506	2	US-09-303-518D-692	Sequence 692, App
168	34	69.4	435	2	US-09-489-039A-7574	Sequence 7574, Ap	241	32	65.3	506	2	US-09-303-518D-694	Sequence 694, App
169	34	69.4	435	2	US-09-489-039A-9822	Sequence 9822, Ap	242	32	65.3	506	2	US-09-303-518D-696	Sequence 696, App
170	34	69.4	435	2	US-09-538-092-24	Sequence 24, Appl	243	32	65.3	630	2	US-09-657-252-4	Sequence 4, Appl1
171	34	69.4	471	2	US-09-902-540-11950	Sequence 11950, A	244	32	65.3	640	2	US-09-592-595A-2	Sequence 2, Appl1
172	34	69.4	559	1	US-08-030-096-6	Sequence 6, Appl1	245	32	65.3	640	2	US-09-592-595A-4	Sequence 4, Appl1
173	34	69.4	570	2	US-09-949-016-10672	Sequence 10672, A	246	32	65.3	656	2	US-08-738-000-4	Sequence 4, Appl1

247	32	65.3	656	2	US-09-258-928-4	Sequence 4, Appli	320	30	61.2	13	2	US-08-974-297-7	Sequence 7, Appli
248	32	65.3	656	2	US-09-347-878-24	Sequence 24, Appli	321	30	61.2	13	2	US-08-974-297-32	Sequence 32, Appli
249	32	65.3	656	2	US-09-660-872A-4	Sequence 4, Appli	322	30	61.2	13	2	US-08-974-297-33	Sequence 33, Appli
250	32	65.3	656	2	US-09-931-795-4	Sequence 4, Appli	323	30	61.2	13	2	US-08-974-297-34	Sequence 34, Appli
251	32	65.3	659	2	US-09-710-279-1596	Sequence 1596, Ap	324	30	61.2	13	2	US-08-974-297-55	Sequence 35, Appli
252	32	65.3	660	2	US-08-738-000-2	Sequence 2, Appli	325	30	61.2	13	2	US-09-258-975-174	Sequence 174, App
253	32	65.3	660	2	US-09-258-928-2	Sequence 2, Appli	326	30	61.2	13	2	US-09-258-928-183	Sequence 183, App
254	32	65.3	660	2	US-09-660-872A-2	Sequence 2, Appli	327	30	61.2	13	2	US-08-660-092-61	Sequence 61, Appl
255	32	65.3	660	2	US-09-931-795-2	Sequence 2, Appli	328	30	61.2	13	2	US-09-042-107-174	Sequence 174, App
256	32	65.3	690	2	US-09-134-001C-4938	Sequence 4938, Ap	329	30	61.2	13	2	US-09-042-107-183	Sequence 183, App
257	32	65.3	769	2	US-08-434-000A-10	Sequence 10, Appl	330	30	61.2	13	2	US-09-160-513-61	Sequence 61, Appl
258	32	65.3	769	2	US-09-312-157-10	Sequence 10, Appl	331	30	61.2	13	2	US-09-722-250D-174	Sequence 174, App
259	32	65.3	769	2	US-09-717-888-10	Sequence 10, Appl	332	30	61.2	13	2	US-09-722-250D-183	Sequence 183, App
260	32	65.3	769	2	US-09-818-247-3	Sequence 3, Appli	333	30	61.2	13	2	US-09-676-475A-174	Sequence 174, App
261	32	65.3	1014	2	US-09-252-991A-29868	Sequence 29868, A	334	30	61.2	13	2	US-08-676-475A-183	Sequence 183, App
262	32	65.3	2710	1	US-08-568-459A-12	Sequence 12, Appl	335	30	61.2	13	2	US-10-607-595-174	Sequence 174, App
263	32	65.3	2710	1	US-08-487-826B-12	Sequence 12, Appl	336	30	61.2	13	2	US-08-748-021-27	Sequence 27, Appli
264	32	65.3	2710	1	US-09-210-288-12	Sequence 12, Appl	337	30	61.2	14	1	US-08-748-021-27	Sequence 27, Appli
265	32	65.3	2710	2	US-10-153-273-12	Sequence 12, Appl	338	30	61.2	14	1	US-08-748-021-28	Sequence 28, Appli
266	32	65.3	3060	1	US-08-487-826B-14	Sequence 14, Appl	339	30	61.2	14	1	US-08-974-297-29	Sequence 29, Appli
267	31	63.3	13	1	US-08-232-453A-59	Sequence 59, Appl	340	30	61.2	14	1	US-08-974-297-31	Sequence 31, Appli
268	31	63.3	103	2	US-09-489-039A-12542	Sequence 12542, A	341	30	61.2	14	1	US-08-974-297-32	Sequence 32, Appli
269	31	63.3	129	2	US-09-543-681A-8076	Sequence 8076, Ap	342	30	61.2	14	2	US-08-974-297-33	Sequence 33, Appli
270	31	63.3	139	2	US-09-328-352-7541	Sequence 7541, Ap	343	30	61.2	14	2	US-08-974-297-34	Sequence 34, Appli
271	31	63.3	154	2	US-09-489-039A-13313	Sequence 13313, A	344	30	61.2	14	2	US-08-974-297-35	Sequence 35, Appli
272	31	63.3	185	2	US-09-270-767-39023	Sequence 39023, A	345	30	61.2	14	2	US-08-974-297-36	Sequence 36, Appli
273	31	63.3	185	2	US-09-270-767-54240	Sequence 54240, A	346	30	61.2	14	2	US-08-974-297-37	Sequence 37, Appli
274	31	63.3	191	1	US-08-469-412A-4	Sequence 4, Appli	347	30	61.2	14	2	US-08-974-297-38	Sequence 38, Appli
275	31	63.3	191	1	US-09-021-715-4	Sequence 4, Appli	348	30	61.2	14	2	US-08-974-297-39	Sequence 39, Appli
276	31	63.3	200	2	US-09-270-767-42543	Sequence 42543, A	349	30	61.2	14	2	US-08-660-092-57	Sequence 57, Appli
277	31	63.3	320	2	US-10-104-047-2641	Sequence 2641, Ap	350	30	61.2	14	2	US-08-660-092-60	Sequence 60, Appli
278	31	63.3	352	2	US-09-489-039A-9426	Sequence 9426, Ap	351	30	61.2	14	2	US-09-160-513-60	Sequence 60, Appli
279	31	63.3	358	2	US-09-489-039A-8685	Sequence 8685, Ap	352	30	61.2	14	2	US-08-318-794-29	Sequence 29, Appli
280	31	63.3	360	2	US-09-116-498-10	Sequence 10, Appl	353	30	61.2	27	2	US-08-470-106-29	Sequence 87, Appli
281	31	63.3	360	2	US-09-116-498-12	Sequence 12, Appl	354	30	61.2	27	2	US-08-118-270-87	Sequence 87, Appli
282	31	63.3	360	2	US-09-852-158-10	Sequence 10, Appl	355	30	61.2	30	4	US-08-166-930-10	Sequence 10, Appli
283	31	63.3	360	2	US-09-852-156-12	Sequence 12, Appl	356	30	61.2	30	4	US-08-166-930-10	Sequence 10, Appli
284	31	63.3	376	2	US-09-602-777A-412	Sequence 412, App	357	30	61.2	30	4	US-08-166-930-10	Sequence 10, Appli
285	31	63.3	407	2	US-09-252-991A-21511	Sequence 21511, A	358	30	61.2	69	1	US-09-408-112-10	Sequence 112, Appl
286	31	63.3	430	2	US-09-248-796A-16772	Sequence 16772, A	359	30	61.2	69	1	US-09-408-112-10	Sequence 112, Appl
287	31	63.3	441	2	US-09-252-991A-22306	Sequence 22306, A	360	30	61.2	72	2	US-09-270-767-58481	Sequence 58481, A
288	31	63.3	458	2	US-09-328-352-4741	Sequence 4741, Ap	361	30	61.2	74	2	US-09-270-767-58481	Sequence 58481, A
289	31	63.3	486	2	US-09-716-865-6	Sequence 6, Appli	362	30	61.2	84	2	US-09-311-021-15410	Sequence 15410, App
290	31	63.3	487	2	US-09-248-796A-18251	Sequence 18251, A	363	30	61.2	85	2	US-09-311-021-15410	Sequence 15410, App
291	31	63.3	506	2	US-09-248-796A-20075	Sequence 20075, A	364	30	61.2	85	2	US-09-311-021-15410	Sequence 15410, App
292	31	63.3	514	2	US-09-252-991A-18161	Sequence 18161, A	365	30	61.2	87	2	US-09-248-796A-27499	Sequence 27499, A
293	31	63.3	522	2	US-09-489-039A-10041	Sequence 10041, A	366	30	61.2	90	2	US-09-540-236-2158	Sequence 2158, App
294	31	63.3	539	2	US-09-248-796A-16827	Sequence 16827, A	367	30	61.2	90	2	US-09-270-767-52162	Sequence 52162, A
295	31	63.3	776	2	US-10-104-047-2108	Sequence 2108, Ap	368	30	61.2	91	2	US-09-543-681A-6263	Sequence 6263, Ap
296	31	63.3	823	2	US-09-000-016-2	Sequence 2, Appli	369	30	61.2	119	2	US-09-543-681A-6263	Sequence 6263, Ap
297	31	63.3	823	2	US-09-514-340-2	Sequence 2, Appli	370	30	61.2	119	2	US-09-543-681A-6263	Sequence 6263, Ap
298	31	63.3	861	2	US-09-552-991A-18375	Sequence 18375, A	371	30	61.2	147	2	US-09-471-276-835	Sequence 471, App
299	31	63.3	1025	1	US-08-304-309-2	Sequence 2, Appli	372	30	61.2	150	2	US-09-513-993C-4231	Sequence 4231, App
300	31	63.3	1025	1	US-08-304-309-4	Sequence 4, Appli	373	30	61.2	150	2	US-09-513-993C-4231	Sequence 4231, App
301	31	63.3	1025	1	US-08-991-942-2	Sequence 2, Appli	374	30	61.2	158	2	US-09-107-532A-7339	Sequence 7339, App
302	31	63.3	1025	2	US-08-991-942-4	Sequence 4, Appli	375	30	61.2	163	2	US-09-252-991A-20993	Sequence 20993, A
303	31	63.3	1025	2	US-09-138-103-2	Sequence 2, Appli	376	30	61.2	172	2	US-09-134-000C-6298	Sequence 6298, App
304	31	63.3	1025	2	US-09-854-886-2	Sequence 2, Appli	377	30	61.2	176	2	US-09-138-000C-6298	Sequence 6298, App
305	31	63.3	1025	4	PCT-US95-04567-2	Sequence 4, Appli	378	30	61.2	183	2	US-09-438-185A-1032	Sequence 1032, App
306	31	63.3	1025	4	PCT-US95-04567-4	Sequence 4, Appli	379	30	61.2	183	2	US-09-438-185A-1032	Sequence 1032, App
307	31	63.3	3460	2	US-09-334-220-1	Sequence 1, Appli	380	30	61.2	189	2	US-09-198-452A-827	Sequence 827, App
308	31	63.3	3461	2	US-09-334-220-2	Sequence 2, Appli	381	30	61.2	192	2	US-09-198-452A-827	Sequence 827, App
309	30.5	62.2	185	2	US-09-258-928-623	Sequence 623, App	382	30	61.2	192	2	US-09-270-767-47611	Sequence 47611, A
310	30.5	62.2	185	2	US-10-004-860-623	Sequence 623, App	383	30	61.2	192	2	US-09-270-767-47611	Sequence 47611, A
311	30	61.2	11	2	US-08-660-092-63	Sequence 63, Appli	384	30	61.2	200	2	US-09-248-796A-20891	Sequence 20891, A
312	30	61.2	11	2	US-09-160-513-63	Sequence 63, Appli	385	30	61.2	198	2	US-08-311-731A-253	Sequence 253, App
313	30	61.2	12	2	US-08-660-092-62	Sequence 62, Appli	386	30	61.2	203	2	US-09-902-540-10736	Sequence 10736, App
314	30	61.2	12	2	US-09-160-513-62	Sequence 62, Appli	387	30	61.2	217	2	US-09-489-039A-8076	Sequence 8076, App
315	30	61.2	13	1	US-08-748-021-7	Sequence 7, Appli	388	30	61.2	243	2	US-09-438-185A-1665	Sequence 1665, App
316	30	61.2	13	1	US-08-748-021-32	Sequence 32, Appli	389	30	61.2	249	2	US-09-107-532A-22	Sequence 22, Appli
317	30	61.2	13	1	US-08-748-021-33	Sequence 33, Appli	390	30	61.2	249	2	US-09-372-448A-6	Sequence 6, Appli
318	30	61.2	13	1	US-08-748-021-34	Sequence 34, Appli	391	30	61.2	250	1	US-08-558-865-2	Sequence 2, Appli
319	30	61.2	13	1	US-08-748-021-55	Sequence 55, Appli	392	30	61.2	250	2	US-08-654-025-2	Sequence 2, Appli

393	30	61.2	250	2	US-08-654-025-7	Sequence 7, Appl1	466	29	59.2	9	2	US-09-759-960-1	Sequence 1, Appl1
394	30	61.2	250	2	US-09-372-422A-24	Sequence 24, Appl1	467	29	59.2	9	2	US-09-601-729-271	Sequence 271, App
395	30	61.2	250	2	US-09-252-991A-32751	Sequence 32751, A	468	29	59.2	9	2	US-10-365-908-5	Sequence 5, Appl1
396	30	61.2	253	2	US-09-902-540-12968	Sequence 12968, A	469	29	59.2	9	4	PCT-US95-02121-65	Sequence 65, Appl1
397	30	61.2	284	2	US-09-270-767-43145	Sequence 43145, A	470	29	59.2	10	2	US-10-365-908-47	Sequence 47, Appl1
398	30	61.2	302	2	US-09-543-681A-6986	Sequence 6986, Ap	471	29	59.2	20	2	US-09-794-5299-12	Sequence 12, Appl1
399	30	61.2	320	2	US-09-270-767-42941	Sequence 42941, A	472	29	59.2	20	2	US-09-794-5298-13	Sequence 13, Appl1
400	30	61.2	345	2	US-10-104-047-3496	Sequence 3496, Ap	473	29	59.2	20	2	US-09-794-5178-12	Sequence 12, Appl1
401	30	61.2	350	2	US-09-489-039A-9626	Sequence 9626, Ap	474	29	59.2	20	2	US-09-794-5178-13	Sequence 13, Appl1
402	30	61.2	352	2	US-09-270-767-45115	Sequence 45115, A	475	29	59.2	20	2	US-09-011-6458-13	Sequence 13, Appl1
403	30	61.2	370	1	US-08-837-593-7	Sequence 7, Appl1	476	29	59.2	20	2	US-09-011-6458-13	Sequence 13, Appl1
404	30	61.2	375	1	US-08-837-593-5	Sequence 5, Appl1	477	29	59.2	20	2	US-09-794-832-12	Sequence 12, Appl1
405	30	61.2	375	1	US-09-623-034-2	Sequence 2, Appl1	478	29	59.2	20	2	US-09-794-832-13	Sequence 13, Appl1
406	30	61.2	381	2	US-09-248-796A-20097	Sequence 20097, A	479	29	59.2	20	2	US-09-680-806A-12	Sequence 12, Appl1
407	30	61.2	382	2	US-09-252-991A-21562	Sequence 21562, A	480	29	59.2	20	2	US-09-680-806A-13	Sequence 13, Appl1
408	30	61.2	459	2	US-09-949-016-10443	Sequence 10443, A	481	29	59.2	20	2	US-09-552-868-12	Sequence 12, Appl1
409	30	61.2	462	2	US-09-540-336-2425	Sequence 2425, Ap	482	29	59.2	20	2	US-09-552-868-13	Sequence 13, Appl1
410	30	61.2	467	2	US-09-252-991A-20991	Sequence 20991, A	483	29	59.2	20	2	US-09-636-295-12	Sequence 12, Appl1
411	30	61.2	486	2	US-09-734-237B-54	Sequence 54, Appl1	484	29	59.2	20	2	US-09-636-295-13	Sequence 13, Appl1
412	30	61.2	487	2	US-09-734-237B-56	Sequence 56, Appl1	485	29	59.2	20	2	US-09-636-295-14	Sequence 14, Appl1
413	30	61.2	488	2	US-09-540-336-2681	Sequence 2681, Ap	486	29	59.2	30	1	US-08-934-915-66	Sequence 66, Appl1
414	30	61.2	488	2	US-09-919-039-33	Sequence 33, Appl1	487	29	59.2	30	2	US-09-486-394-4	Sequence 4, Appl1
415	30	61.2	491	1	US-08-206-176-4	Sequence 4, Appl1	488	29	59.2	33	2	US-09-927-357-663	Sequence 663, App
416	30	61.2	493	2	US-09-949-016-9617	Sequence 9617, Ap	489	29	59.2	33	2	US-09-973-278-444	Sequence 444, App
417	30	61.2	514	1	US-08-361-920-21	Sequence 21, Appl1	490	29	59.2	62	2	US-09-621-976-5283	Sequence 46, Appl1
418	30	61.2	514	1	US-08-479-939-21	Sequence 21, Appl1	491	29	59.2	63	2	US-09-370-767-61446	Sequence 5283, Ap
419	30	61.2	514	1	US-08-483-432-21	Sequence 21, Appl1	492	29	59.2	63	2	US-09-370-767-61446	Sequence 61446, A
420	30	61.2	518	2	US-10-104-047-2392	Sequence 2392, Ap	493	29	59.2	78	2	US-09-583-110-3010	Sequence 3010, Ap
421	30	61.2	540	2	US-08-687-5808-7	Sequence 7, Appl1	494	29	59.2	82	2	US-09-107-433-2951	Sequence 2951, Ap
422	30	61.2	582	2	US-09-477-962-94	Sequence 94, Appl1	495	29	59.2	83	2	US-09-540-236-3836	Sequence 3836, Ap
423	30	61.2	632	2	US-09-228-986-77	Sequence 77, Appl1	496	29	59.2	87	2	US-09-248-796A-22460	Sequence 22460, A
424	30	61.2	632	2	US-09-228-986-77	Sequence 77, Appl1	497	29	59.2	93	2	US-09-949-016-8318	Sequence 8318, Ap
425	30	61.2	671	2	US-09-252-991A-23641	Sequence 23641, A	498	29	59.2	107	2	US-09-270-767-60221	Sequence 60221, A
426	30	61.2	687	2	US-09-902-540-10726	Sequence 10726, A	499	29	59.2	110	2	US-09-543-681A-7172	Sequence 7172, Ap
427	30	61.2	801	2	US-09-710-279-2020	Sequence 2020, Ap	500	29	59.2	110	2	US-09-248-796A-26406	Sequence 26406, A
428	30	61.2	808	2	US-09-134-001C-3105	Sequence 3105, Ap	501	29	59.2	120	2	US-09-489-039A-10075	Sequence 10075, A
429	30	61.2	917	2	US-09-252-991A-25101	Sequence 25101, A	502	29	59.2	132	2	US-09-134-000C-3614	Sequence 3614, Ap
430	30	61.2	920	2	US-09-643-597-357	Sequence 357, App	503	29	59.2	136	2	US-09-134-001C-4552	Sequence 4552, Ap
431	30	61.2	920	2	US-09-630-9408-357	Sequence 357, App	504	29	59.2	138	2	US-10-104-047-3372	Sequence 3372, Ap
432	30	61.2	920	2	US-10-007-700-357	Sequence 357, App	505	29	59.2	139	2	US-09-902-540-12007	Sequence 12007, A
433	30	61.2	942	2	US-09-919-172-87	Sequence 87, Appl1	506	29	59.2	159	2	US-09-134-000C-4450	Sequence 4450, Ap
434	30	61.2	943	2	US-09-193-562D-32	Sequence 32, Appl1	507	29	59.2	160	2	US-09-248-796A-14432	Sequence 14432, A
435	30	61.2	943	2	US-09-643-597-161	Sequence 161, App	508	29	59.2	161	2	US-09-270-767-43252	Sequence 43252, A
436	30	61.2	943	2	US-09-480-884A-161	Sequence 161, App	509	29	59.2	164	2	US-09-252-991A-16845	Sequence 16845, A
437	30	61.2	943	2	US-09-542-615A-161	Sequence 161, App	510	29	59.2	171	2	US-09-352-991A-25356	Sequence 25356, A
438	30	61.2	943	2	US-09-606-421B-161	Sequence 161, App	511	29	59.2	182	2	US-09-438-185A-51	Sequence 51, Appl1
439	30	61.2	943	2	US-09-623-624-4	Sequence 4, Appl1	512	29	59.2	196	2	US-09-543-681A-7659	Sequence 7659, Ap
440	30	61.2	943	2	US-09-221-107-161	Sequence 161, App	513	29	59.2	200	2	US-09-252-991A-20897	Sequence 20897, A
441	30	61.2	943	2	US-10-055-412B-32	Sequence 32, Appl1	514	29	59.2	218	2	US-09-902-540-10028	Sequence 10028, A
442	30	61.2	943	2	US-09-466-396A-161	Sequence 161, App	515	29	59.2	224	2	US-09-800-729-205	Sequence 205, App
443	30	61.2	943	2	US-09-476-496A-161	Sequence 161, App	516	29	59.2	225	1	US-08-300-903A-14	Sequence 14, Appl1
444	30	61.2	943	2	US-10-270-595-4	Sequence 4, Appl1	517	29	59.2	225	2	US-09-583-110-3558	Sequence 14, Appl1
445	30	61.2	943	2	US-09-630-9408-161	Sequence 161, App	518	29	59.2	225	2	US-09-485-885-16	Sequence 16, Appl1
446	30	61.2	943	2	US-09-285-479-161	Sequence 161, App	519	29	59.2	227	2	US-09-485-885-15	Sequence 15, Appl1
447	30	61.2	943	2	US-10-007-700-161	Sequence 161, App	520	29	59.2	227	2	US-09-485-885-14	Sequence 14, Appl1
448	30	61.2	946	2	US-08-560-005-4	Sequence 4, Appl1	521	29	59.2	227	2	US-09-634-238-324	Sequence 324, App
449	30	61.2	946	2	US-09-418-540-4	Sequence 4, Appl1	522	29	59.2	228	2	US-09-470-767-39073	Sequence 39073, A
450	30	61.2	946	2	US-09-969-528-4	Sequence 4, Appl1	523	29	59.2	228	2	US-09-270-767-54290	Sequence 54290, A
451	30	61.2	1252	2	US-09-902-540-13967	Sequence 13967, A	524	29	59.2	230	2	US-09-107-433-3086	Sequence 3086, Ap
452	30	61.2	1252	2	US-08-138-641-2	Sequence 2, Appl1	525	29	59.2	233	2	US-09-489-039A-7432	Sequence 7432, Ap
453	30	61.2	1290	1	US-08-138-133-2	Sequence 2, Appl1	526	29	59.2	234	1	US-08-300-903A-11	Sequence 11, Appl1
454	30	61.2	1290	1	US-08-138-133-2	Sequence 2, Appl1	527	29	59.2	234	1	US-08-988-197-11	Sequence 11, Appl1
455	30	61.2	1479	2	US-09-538-092-956	Sequence 956, App	528	29	59.2	234	2	US-10-385-072-11	Sequence 11, Appl1
456	30	61.2	1479	2	US-09-949-016-10141	Sequence 10141, A	529	29	59.2	235	2	US-09-489-039A-6834	Sequence 6834, Ap
457	30	61.2	1479	2	US-08-840-062-2	Sequence 2, Appl1	530	29	59.2	242	2	US-09-489-039A-7317	Sequence 7317, Ap
458	30	61.2	2210	2	US-08-309-572-7	Sequence 7, Appl1	531	29	59.2	242	2	US-08-469-260A-42	Sequence 42, Appl1
459	30	61.2	2210	2	US-09-718-096-7	Sequence 7, Appl1	532	29	59.2	245	2	US-08-468-446-42	Sequence 42, Appl1
460	29.5	60.2	124	2	US-09-640-211A-880	Sequence 880, App	533	29	59.2	245	2	US-08-467-344A-42	Sequence 42, Appl1
461	29	59.2	9	1	US-08-787-547-106	Sequence 106, App	534	29	59.2	245	2	US-08-424-550B-42	Sequence 42, Appl1
462	29	59.2	9	2	US-08-948-378A-1	Sequence 1, Appl1	535	29	59.2	247	2	US-09-252-991A-26375	Sequence 26375, A
463	29	59.2	9	2	US-09-124-671-9	Sequence 9, Appl1	536	29	59.2	250	2	US-09-082-737-3	Sequence 3, Appl1
464	29	59.2	9	2	US-09-169-425C-1	Sequence 1, Appl1	537	29	59.2	250	2	US-09-718-032-3	Sequence 3, Appl1
465	29	59.2	9	2	US-08-197-484-65	Sequence 65, Appl1	538	29	59.2	251	1	US-08-300-903A-7	Sequence 7, Appl1

539	29	59.2	251	2	US-08-988-197-7	Sequence 7, Appl1	612	29	59.2	449	2	US-09-328-352-7512	Sequence 7512, Ap
540	29	59.2	251	2	US-10-385-072-7	Sequence 7, Appl1	613	29	59.2	450	2	US-09-825-923-4	Sequence 4, Appl1
541	29	59.2	259	2	US-09-248-796A-18367	Sequence 18367, A	614	29	59.2	471	2	US-09-107-433-3636	Sequence 3636, Ap
542	29	59.2	259	2	US-09-902-540-11317	Sequence 11317, A	615	29	59.2	471	2	US-09-955-732A-21	Sequence 21, Appl
543	29	59.2	267	1	US-08-300-903A-15	Sequence 15, Appl	616	29	59.2	477	2	US-09-252-991A-24172	Sequence 24172, A
544	29	59.2	267	1	US-08-988-197-15	Sequence 15, Appl	617	29	59.2	480	2	US-09-902-540-10711	Sequence 10711, A
545	29	59.2	267	2	US-10-385-072-15	Sequence 15, Appl	618	29	59.2	482	2	US-09-489-039A-9369	Sequence 9369, App
546	29	59.2	267	2	US-09-949-002-335	Sequence 335, App	619	29	59.2	488	2	US-09-461-697-375	Sequence 375, App
547	29	59.2	268	2	US-09-543-681A-4676	Sequence 4676, App	620	29	59.2	490	2	US-09-461-697-373	Sequence 373, App
548	29	59.2	268	2	US-09-270-767-43013	Sequence 43013, A	621	29	59.2	492	2	US-09-198-452A-485	Sequence 485, App
549	29	59.2	271	2	US-09-902-540-12298	Sequence 12298, A	622	29	59.2	492	2	US-09-270-767-46706	Sequence 46706, A
550	29	59.2	272	1	US-08-117-083-13	Sequence 13, Appl	623	29	59.2	492	2	US-09-270-767-46706	Sequence 148, App
551	29	59.2	281	2	US-09-270-767-62321	Sequence 62321, A	624	29	59.2	500	2	US-10-012-231A-148	Sequence 148, App
552	29	59.2	282	2	US-09-902-540-13297	Sequence 13297, A	625	29	59.2	500	2	US-10-015-898A-148	Sequence 148, App
553	29	59.2	294	2	US-09-949-002-429	Sequence 429, App	626	29	59.2	500	2	US-10-015-898A-148	Sequence 148, App
554	29	59.2	297	2	US-09-270-767-44761	Sequence 44761, A	627	29	59.2	500	2	US-10-006-678A-148	Sequence 148, App
555	29	59.2	304	2	US-09-198-452A-541	Sequence 541, App	628	29	59.2	500	2	US-10-015-671A-148	Sequence 148, App
556	29	59.2	309	2	US-09-134-001C-5667	Sequence 5667, App	629	29	59.2	500	2	US-10-015-933A-148	Sequence 148, App
557	29	59.2	311	2	US-09-659-737A-8	Sequence 8, Appl1	630	29	59.2	500	2	US-10-011-833A-148	Sequence 148, App
558	29	59.2	311	2	US-10-885-921-8	Sequence 8, Appl1	631	29	59.2	500	2	US-10-006-041A-148	Sequence 148, App
559	29	59.2	313	2	US-09-538-092-722	Sequence 722, App	632	29	59.2	500	2	US-10-012-064A-148	Sequence 148, App
560	29	59.2	330	1	US-08-118-270-20	Sequence 20, Appl	633	29	59.2	511	2	US-09-949-016-6111	Sequence 6111, Ap
561	29	59.2	330	4	PCT-US93-08528-20	Sequence 2, Appl1	634	29	59.2	519	2	US-09-949-016-7883	Sequence 7883, Ap
562	29	59.2	336	1	US-07-904-073-2	Sequence 2, Appl1	635	29	59.2	534	2	US-09-489-039A-8550	Sequence 8550, Ap
563	29	59.2	336	1	US-08-442-043A-16	Sequence 16, Appl	636	29	59.2	542	2	US-09-949-016-10795	Sequence 10795, A
564	29	59.2	336	2	US-08-441-893A-16	Sequence 16, Appl	637	29	59.2	555	2	US-09-489-039A-10752	Sequence 10752, A
565	29	59.2	336	2	US-09-543-681A-5499	Sequence 5499, App	638	29	59.2	568	2	US-09-328-352-5460	Sequence 5460, Ap
566	29	59.2	338	2	US-09-902-540-11444	Sequence 11444, A	639	29	59.2	569	1	US-07-821-716-2	Sequence 2, Appl1
567	29	59.2	340	2	US-09-328-352-6577	Sequence 6577, App	640	29	59.2	569	1	US-08-381-603-2	Sequence 2, Appl1
568	29	59.2	343	2	US-09-328-352-6577	Sequence 6577, App	641	29	59.2	569	2	US-08-924-376-2	Sequence 2, Appl1
569	29	59.2	345	2	US-09-543-681A-7546	Sequence 7546, App	642	29	59.2	569	2	US-08-685-212-2	Sequence 2, Appl1
570	29	59.2	348	2	US-09-489-039A-8632	Sequence 8632, App	643	29	59.2	569	2	US-09-173-151A-31	Sequence 31, Appl
571	29	59.2	361	2	US-09-602-787A-158	Sequence 158, App	644	29	59.2	569	2	US-08-466-932A-2	Sequence 2, Appl1
572	29	59.2	371	1	US-08-828-313-6	Sequence 6, Appl1	645	29	59.2	569	2	US-08-406-824A-6	Sequence 6, Appl1
573	29	59.2	375	2	US-09-828-313-34	Sequence 34, Appl	646	29	59.2	569	4	US-09-949-016-6000	Sequence 6000, Ap
574	29	59.2	378	2	US-09-107-532A-7777	Sequence 3777, App	647	29	59.2	569	4	PCT-US94-02414-2	Sequence 2, Appl1
575	29	59.2	379	2	US-09-489-039A-8951	Sequence 8951, App	648	29	59.2	569	4	PCT-US96-08899-2	Sequence 2, Appl1
576	29	59.2	379	2	US-09-248-796A-17132	Sequence 17132, A	649	29	59.2	588	2	US-09-949-016-8572	Sequence 8572, Ap
577	29	59.2	383	2	US-09-485-885-23	Sequence 23, Appl	650	29	59.2	591	2	US-09-882-737-2	Sequence 2, Appl1
578	29	59.2	390	2	US-09-198-452A-254	Sequence 254, App	651	29	59.2	591	2	US-09-718-032-2	Sequence 2, Appl1
579	29	59.2	390	2	US-09-438-185A-243	Sequence 243, App	652	29	59.2	591	2	US-09-291-417D-103	Sequence 103, App
580	29	59.2	392	2	US-09-489-039A-11256	Sequence 11256, A	653	29	59.2	591	2	US-09-949-016-6665	Sequence 6665, App
581	29	59.2	395	6	5196194-18	Sequence 11256, A	654	29	59.2	598	2	US-09-252-991A-25875	Sequence 25875, A
582	29	59.2	397	2	US-09-252-991A-27923	Sequence 27923, A	655	29	59.2	598	2	US-09-270-767-44708	Sequence 44708, A
583	29	59.2	398	2	US-09-688-188B-30	Sequence 30, Appl	656	29	59.2	620	2	US-09-949-016-7206	Sequence 7206, Ap
584	29	59.2	398	2	US-09-291-417D-30	Sequence 30, Appl	657	29	59.2	635	2	US-09-949-016-6991	Sequence 6991, Ap
585	29	59.2	402	2	US-09-328-352-4281	Sequence 4281, App	658	29	59.2	659	2	US-09-955-732A-2	Sequence 2, Appl1
586	29	59.2	408	2	US-09-270-767-60172	Sequence 60172, A	659	29	59.2	665	2	US-10-104-047-3377	Sequence 3377, Ap
587	29	59.2	409	2	US-09-438-185A-503	Sequence 503, App	660	29	59.2	672	2	US-09-543-681A-5976	Sequence 5976, Ap
588	29	59.2	410	2	US-09-248-796A-18461	Sequence 18461, A	661	29	59.2	681	2	US-09-688-188B-29	Sequence 29, Appl
589	29	59.2	414	2	US-09-605-703B-2352	Sequence 2352, App	662	29	59.2	681	2	US-09-765-815-2	Sequence 29, Appl
590	29	59.2	416	2	US-09-949-016-10121	Sequence 10121, A	663	29	59.2	681	2	US-09-291-417D-29	Sequence 29, Appl
591	29	59.2	416	2	US-09-461-697-389	Sequence 389, App	664	29	59.2	681	2	US-09-668-188B-10	Sequence 10, Appl
592	29	59.2	419	2	US-09-134-001C-3441	Sequence 3441, App	665	29	59.2	681	2	US-09-737A-10	Sequence 10, Appl
593	29	59.2	421	2	US-09-198-452A-932	Sequence 932, App	666	29	59.2	686	2	US-09-949-016-1874	Sequence 1874, Ap
594	29	59.2	421	2	US-09-438-185A-869	Sequence 869, App	667	29	59.2	694	2	US-09-949-016-10445	Sequence 10445, A
595	29	59.2	423	2	US-09-902-540-10860	Sequence 10860, A	668	29	59.2	708	2	US-09-907-794A-69	Sequence 69, Appl
596	29	59.2	427	2	US-09-252-991A-29948	Sequence 29948, A	669	29	59.2	708	2	US-09-905-125A-69	Sequence 69, Appl
597	29	59.2	428	2	US-09-385-219A-6	Sequence 6, Appl1	670	29	59.2	708	2	US-09-905-125A-69	Sequence 69, Appl
598	29	59.2	437	2	US-09-830-189C-2	Sequence 6, Appl1	671	29	59.2	708	2	US-09-905-125A-69	Sequence 69, Appl
599	29	59.2	437	2	US-09-991-181-355	Sequence 355, App	672	29	59.2	708	2	US-09-905-125A-69	Sequence 69, Appl
600	29	59.2	437	2	US-09-990-444-355	Sequence 355, App	673	29	59.2	708	2	US-09-903-603A-69	Sequence 69, Appl
601	29	59.2	437	2	US-10-033-301-16	Sequence 16, Appl	674	29	59.2	708	2	US-09-904-920A-69	Sequence 69, Appl
602	29	59.2	437	2	US-09-997-333-355	Sequence 355, App	675	29	59.2	708	2	US-09-909-064-69	Sequence 69, Appl
603	29	59.2	437	2	US-09-992-598-355	Sequence 355, App	676	29	59.2	708	2	US-09-905-381A-69	Sequence 69, Appl
604	29	59.2	440	1	US-08-476-008-69	Sequence 29525, A	677	29	59.2	708	2	US-09-905-381A-69	Sequence 69, Appl
605	29	59.2	443	1	US-08-306-063-69	Sequence 69, Appl	678	29	59.2	708	2	US-09-906-618-69	Sequence 69, Appl
606	29	59.2	443	1	US-08-306-063-69	Sequence 69, Appl	679	29	59.2	708	2	US-09-904-462-69	Sequence 69, Appl
607	29	59.2	443	1	US-08-306-063-69	Sequence 69, Appl	680	29	59.2	708	2	US-09-902-736A-69	Sequence 69, Appl
608	29	59.2	443	1	US-08-306-063-69	Sequence 69, Appl	681	29	59.2	708	2	US-09-906-722A-69	Sequence 69, Appl
609	29	59.2	447	2	US-09-305-001-2	Sequence 2, Appl1	682	29	59.2	720	2	US-09-634-238-332	Sequence 332, App
610	29	59.2	447	2	US-09-825-923-2	Sequence 2, Appl1	683	29	59.2	737	2	US-09-955-732A-13	Sequence 13, Appl
611	29	59.2	447	2	US-09-583-110-3287	Sequence 3287, Ap	684	29	59.2	777	1	US-08-477-396A-4	Sequence 4, Appl1

685	29	59.2	779	1	US-08-426-627-4	Sequence 4, Appl1	758	28	57.1	70	2	US-09-248-796A-21327	Sequence 21327, A
686	29	59.2	779	1	US-08-426-627-24	Sequence 24, Appl1	759	28	57.1	71	2	US-09-328-352-5234	Sequence 5234, Ap
687	29	59.2	779	2	US-09-461-912A-39	Sequence 39, Appl1	760	28	57.1	75	1	US-08-454-557C-48	Sequence 48, Appl1
688	29	59.2	811	1	US-08-426-627-2	Sequence 2, Appl1	761	28	57.1	75	1	US-08-340-426D-48	Sequence 48, Appl1
689	29	59.2	811	1	US-08-426-627-22	Sequence 22, Appl1	762	28	57.1	75	1	US-08-450-673C-48	Sequence 48, Appl1
690	29	59.2	836	1	US-08-426-627-6	Sequence 6, Appl1	763	28	57.1	75	2	US-10-153-334-7	Sequence 7, Appl1
691	29	59.2	837	1	US-08-426-627-23	Sequence 23, Appl1	764	28	57.1	75	4	PCT-US95-17111A-48	Sequence 48, Appl1
692	29	59.2	878	2	US-09-826-509-347	Sequence 347, App	765	28	57.1	80	2	US-09-513-999C-4166	Sequence 4166, Ap
693	29	59.2	879	2	US-09-799-875-2	Sequence 2, Appl1	766	28	57.1	80	2	US-09-270-767-43025	Sequence 43025, A
694	29	59.2	879	2	US-10-282-162-34	Sequence 34, Appl1	767	28	57.1	88	2	US-09-270-767-58353	Sequence 58353, A
695	29	59.2	900	2	US-10-282-162-40	Sequence 40, Appl1	768	28	57.1	90	2	US-09-513-999C-4167	Sequence 4167, Ap
696	29	59.2	902	2	US-10-282-162-36	Sequence 36, Appl1	769	28	57.1	92	2	US-09-902-540-10408	Sequence 10408, A
697	29	59.2	902	2	US-10-282-162-38	Sequence 38, Appl1	770	28	57.1	93	2	US-09-489-039A-7959	Sequence 7959, Ap
698	29	59.2	902	2	US-10-282-162-42	Sequence 42, Appl1	771	28	57.1	93	2	US-09-471-276-821	Sequence 821, App
699	29	59.2	902	2	US-10-282-162-44	Sequence 44, Appl1	772	28	57.1	95	2	US-09-248-796A-21403	Sequence 21403, A
700	29	59.2	905	1	US-08-072-574-2	Sequence 2, Appl1	773	28	57.1	96	1	US-09-471-276-882	Sequence 882, App
701	29	59.2	906	1	US-08-486-370-2	Sequence 2, Appl1	774	28	57.1	96	2	US-08-442-063A-33	Sequence 33, Appl1
702	29	59.2	906	2	US-08-367-264-2	Sequence 2, Appl1	775	28	57.1	98	2	US-10-194-975-34	Sequence 34, Appl1
703	29	59.2	906	2	US-09-153-757-2	Sequence 2, Appl1	776	28	57.1	102	2	US-09-034-916-16	Sequence 16, Appl1
704	29	59.2	906	2	US-09-459-715-2	Sequence 2, Appl1	777	28	57.1	106	1	US-08-378-939-42	Sequence 42, Appl1
705	29	59.2	906	2	PCT-US91-09422-17	Sequence 17, Appl1	778	28	57.1	114	2	US-09-252-993A-31192	Sequence 31192, A
706	29	59.2	910	2	US-09-313-942-28	Sequence 28, Appl1	779	28	57.1	114	2	US-08-409-373B-4	Sequence 4, Appl1
707	29	59.2	910	2	US-10-282-162-28	Sequence 28, Appl1	780	28	57.1	116	1	US-08-409-373B-4	Sequence 4, Appl1
708	29	59.2	978	2	US-10-197-220-65	Sequence 65, Appl1	781	28	57.1	116	2	US-08-393-985-16	Sequence 16, Appl1
709	29	59.2	979	2	US-09-438-185A-456	Sequence 456, App	782	28	57.1	116	2	US-08-621-018B-10	Sequence 10, Appl1
710	29	59.2	1056	1	US-08-687-289A-7	Sequence 7, Appl1	783	28	57.1	116	2	US-08-819-286-2	Sequence 2, Appl1
711	29	59.2	1056	1	US-08-687-289A-8	Sequence 8, Appl1	784	28	57.1	116	2	US-09-483-665-10	Sequence 10, Appl1
712	29	59.2	1056	2	US-09-435-897-7	Sequence 8, Appl1	785	28	57.1	116	2	US-09-248-796A-24825	Sequence 24825, A
713	29	59.2	1056	2	US-09-435-897-8	Sequence 8, Appl1	786	28	57.1	132	2	US-08-844-215-6	Sequence 6, Appl1
714	29	59.2	1056	2	US-10-146-704-2	Sequence 2, Appl1	787	28	57.1	132	2	US-09-270-767-43709	Sequence 43709, A
715	29	59.2	1122	2	US-08-538-526-1	Sequence 1, Appl1	788	28	57.1	134	2	US-09-471-276-845	Sequence 845, App
716	29	59.2	1139	1	US-08-041-538-2	Sequence 2, Appl1	789	28	57.1	134	2	US-09-471-276-845	Sequence 845, App
717	29	59.2	1139	1	US-08-463-642-2	Sequence 2, Appl1	790	28	57.1	140	2	US-09-270-767-40110	Sequence 40110, A
718	29	59.2	1139	1	US-08-455-602-2	Sequence 2, Appl1	791	28	57.1	140	2	US-09-270-767-55326	Sequence 55326, A
719	29	59.2	1199	1	US-08-465-157-2	Sequence 2, Appl1	792	28	57.1	141	2	US-08-442-063A-36	Sequence 36, Appl1
720	29	59.2	1199	4	PCT-US91-09422-2	Sequence 2, Appl1	793	28	57.1	143	2	US-09-270-767-33298	Sequence 33298, A
721	29	59.2	1212	2	US-08-252-991A-26616	Sequence 26616, A	794	28	57.1	143	2	US-09-270-767-48815	Sequence 48815, A
722	29	59.2	1212	2	US-08-687-289A-6	Sequence 6, Appl1	795	28	57.1	149	2	US-10-101-464A-545	Sequence 545, App
723	29	59.2	1219	1	US-09-435-897-6	Sequence 6, Appl1	796	28	57.1	155	2	US-09-248-796A-18418	Sequence 18418, A
724	29	59.2	1253	1	US-07-920-281C-3	Sequence 3, Appl1	797	28	57.1	164	2	US-09-582-934-3	Sequence 3, Appl1
725	29	59.2	1253	2	US-08-466-277-3	Sequence 3, Appl1	798	28	57.1	169	2	US-10-104-047-3827	Sequence 3827, Ap
726	29	59.2	1253	2	US-09-688-842-3	Sequence 3, Appl1	799	28	57.1	172	2	US-09-489-039A-9162	Sequence 9162, Ap
727	29	59.2	1261	2	US-09-949-016-9651	Sequence 9651, Ap	800	28	57.1	178	2	US-09-270-767-60879	Sequence 60879, A
728	29	59.2	1676	2	US-08-487-283A-2	Sequence 2, Appl1	801	28	57.1	187	2	US-10-101-464A-710	Sequence 710, App
729	29	59.2	1680	2	US-09-949-016-9777	Sequence 9777, Ap	802	28	57.1	188	1	US-08-442-063A-39	Sequence 39, Appl1
730	29	59.2	1690	2	US-09-595-684B-39	Sequence 39, Appl1	803	28	57.1	188	2	US-09-489-039A-7704	Sequence 7704, Ap
731	29	59.2	1690	2	US-09-949-016-6474	Sequence 6474, Ap	804	28	57.1	190	2	US-09-854-864-24	Sequence 24, Appl1
732	29	59.2	1695	2	US-08-469-260A-387	Sequence 387, Ap	805	28	57.1	199	2	US-09-270-767-31974	Sequence 31974, A
733	29	59.2	2972	2	US-08-488-446-387	Sequence 387, App	806	28	57.1	201	2	US-09-849-016-6041	Sequence 6041, Ap
734	29	59.2	2972	2	US-08-467-344A-387	Sequence 387, App	807	28	57.1	213	2	US-10-104-047-3861	Sequence 3861, Ap
735	29	59.2	2972	2	US-08-424-550B-387	Sequence 387, App	808	28	57.1	215	2	US-09-248-796A-18274	Sequence 18274, A
736	29	59.2	2972	2	US-09-915-181A-6	Sequence 6, Appl1	809	28	57.1	217	2	US-09-543-681A-6518	Sequence 6518, Ap
737	28.5	58.2	563	2	US-08-864-785-1	Sequence 6, Appl1	810	28	57.1	219	2	US-10-101-464A-568	Sequence 10574, A
738	28	58.2	576	1	US-08-748-021-65	Sequence 65, Appl1	811	28	57.1	226	2	US-09-248-796A-17599	Sequence 568, App
739	28	57.1	9	1	US-08-974-297-65	Sequence 65, Appl1	812	28	57.1	226	2	US-09-489-039A-7761	Sequence 7761, Ap
740	28	57.1	9	2	US-08-159-339A-83	Sequence 83, Appl1	813	28	57.1	228	2	US-09-502-540-9809	Sequence 9809, Ap
741	28	57.1	9	2	US-09-169-425C-22	Sequence 22, Appl1	814	28	57.1	228	2	US-08-442-063A-759	Sequence 759, App
742	28	57.1	9	2	US-09-759-960-22	Sequence 22, Appl1	815	28	57.1	229	2	US-10-101-464A-42	Sequence 42, Appl1
743	28	57.1	9	2	US-10-365-908-14	Sequence 14, Appl1	816	28	57.1	236	1	US-08-442-063A-42	Sequence 42, Appl1
744	28	57.1	9	2	US-10-365-908-64	Sequence 64, Appl1	817	28	57.1	250	2	US-09-173-300-33	Sequence 33, Appl1
745	28	57.1	10	2	US-10-365-908-62	Sequence 62, Appl1	818	28	57.1	255	2	US-09-173-300-33	Sequence 33, Appl1
746	28	57.1	12	1	US-08-442-063A-23	Sequence 23, Appl1	819	28	57.1	255	2	US-10-027-450-33	Sequence 33, Appl1
747	28	57.1	15	1	US-08-726-306A-55	Sequence 55, Appl1	820	28	57.1	261	2	US-09-329-914-6	Sequence 6, Appl1
748	28	57.1	15	1	US-09-205-358-946	Sequence 946, App	821	28	57.1	268	2	US-09-461-325-346	Sequence 346, App
749	28	57.1	28	2	US-10-004-860-946	Sequence 946, App	822	28	57.1	268	2	US-10-012-542-346	Sequence 346, App
750	28	57.1	37	2	US-09-732-210-507	Sequence 507, App	823	28	57.1	268	2	US-10-115-123-346	Sequence 346, App
751	28	57.1	47	1	US-08-442-063A-54	Sequence 54, Appl1	824	28	57.1	270	1	US-09-055-095-4	Sequence 4, Appl1
752	28	57.1	50	2	US-09-205-258-586	Sequence 586, App	825	28	57.1	270	1	US-08-809-494A-2	Sequence 2, Appl1
753	28	57.1	53	2	US-10-004-860-586	Sequence 586, App	826	28	57.1	270	2	US-09-352-302-2	Sequence 2, Appl1
754	28	57.1	60	2	US-09-248-796A-27475	Sequence 27475, A	827	28	57.1	270	2	US-09-252-991A-21118	Sequence 21118, A
755	28	57.1	65	2	US-09-770-595A-20	Sequence 20, Appl1	828	28	57.1	273	1	US-09-055-095-3	Sequence 3, Appl1
756	28	57.1	67	2	US-09-248-796A-23605	Sequence 23605, A	829	28	57.1	273	1	US-08-809-494A-4	Sequence 4, Appl1
757	28	57.1	67	2			830	28	57.1	273	1		

831	28	57.1	273	1	US-08-809-494A-6	Sequence 6, Appli	904	28	57.1	420	2	US-09-531-914-8	Sequence 8, Appli
832	28	57.1	273	2	US-09-352-302-4	Sequence 4, Appli	905	28	57.1	422	2	US-09-252-991A-27513	Sequence 27513, A
833	28	57.1	273	2	US-09-352-302-6	Sequence 6, Appli	906	28	57.1	431	2	US-09-134-001C-3051	Sequence 3051, Ap
834	28	57.1	276	1	US-08-070-301-11	Sequence 11, Appli	907	28	57.1	432	2	US-10-101-464A-938	Sequence 938, App
835	28	57.1	276	2	US-09-252-991A-32703	Sequence 32703, A	908	28	57.1	433	2	US-09-540-236-2969	Sequence 2969, Ap
836	28	57.1	276	2	US-09-543-681A-4845	Sequence 4845, Ap	909	28	57.1	442	2	US-09-540-236-2853	Sequence 2853, Ap
837	28	57.1	282	1	US-08-442-063A-45	Sequence 45, Appli	910	28	57.1	441	2	US-09-328-352-8150	Sequence 8150, Ap
838	28	57.1	290	2	US-09-270-767-11454	Sequence 41454, A	911	28	57.1	441	2	US-09-583-110-3763	Sequence 3763, Ap
839	28	57.1	296	2	US-09-543-681A-6537	Sequence 6537, Ap	912	28	57.1	442	2	US-09-107-433-4820	Sequence 4820, Ap
840	28	57.1	296	2	US-10-101-464A-569	Sequence 569, App	913	28	57.1	442	2	US-09-557-524B-4	Sequence 4, Appli
841	28	57.1	298	2	US-09-582-934-2	Sequence 2, Appli	914	28	57.1	442	2	US-09-252-991A-24194	Sequence 24194, A
842	28	57.1	299	2	US-09-902-540-12051	Sequence 12051, A	915	28	57.1	470	2	US-09-328-352-6912	Sequence 6912, Ap
843	28	57.1	301	2	US-09-582-934-1	Sequence 1, Appli	916	28	57.1	481	6	5164481-1	Sequence 612, App
844	28	57.1	303	2	US-09-902-540-44250	Sequence 14250, A	917	28	57.1	482	2	US-09-252-991A-22658	Sequence 22658, A
845	28	57.1	307	1	US-08-442-063A-48	Sequence 48, Appli	918	28	57.1	484	2	US-09-538-092-382	Sequence 382, App
846	28	57.1	308	2	US-09-328-352-7093	Sequence 7093, Ap	919	28	57.1	444	2	US-09-487-558B-334	Sequence 334, App
847	28	57.1	310	2	US-09-173-300-31	Sequence 31, Appli	920	28	57.1	447	1	US-08-218-943-2	Sequence 2, Appli
848	28	57.1	310	2	US-09-270-767-45376	Sequence 45376, A	921	28	57.1	447	1	US-09-489-039A-11852	Sequence 11852, A
849	28	57.1	310	2	US-10-027-450-31	Sequence 31, Appli	922	28	57.1	444	2	US-09-477-962-104	Sequence 104, App
850	28	57.1	321	2	US-09-949-002-519	Sequence 519, App	923	28	57.1	497	2	US-09-248-796A-17878	Sequence 17878, A
851	28	57.1	321	2	US-09-489-039A-9892	Sequence 9892, Ap	924	28	57.1	497	2	US-09-862-027-8	Sequence 8, Appli
852	28	57.1	327	2	US-08-513-974B-372	Sequence 372, App	925	28	57.1	509	2	US-08-030-096-2	Sequence 2, Appli
853	28	57.1	328	2	US-08-513-974B-39	Sequence 39, Appli	926	28	57.1	509	2	US-09-183-959-8	Sequence 8, Appli
854	28	57.1	328	2	US-08-513-974B-371	Sequence 371, App	927	28	57.1	509	2	US-09-347-650-6	Sequence 6, Appli
855	28	57.1	328	2	US-09-461-436B-39	Sequence 39, Appli	928	28	57.1	509	2	US-09-535-115-8	Sequence 8, Appli
856	28	57.1	329	2	US-09-071-035-368	Sequence 368, App	929	28	57.1	509	5	US-10-095-846-8	Sequence 8, Appli
857	28	57.1	329	2	US-10-206-576-368	Sequence 368, App	930	28	57.1	509	5	US-09-800-729-124	Sequence 124, App
858	28	57.1	332	1	US-08-405-175A-5	Sequence 5, Appli	931	28	57.1	514	2	US-09-538-092-1318	Sequence 1318, Ap
859	28	57.1	333	1	US-08-442-063A-27	Sequence 27, Appli	932	28	57.1	515	2	US-09-329-418-3	Sequence 3, Appli
860	28	57.1	333	2	US-09-543-681A-8193	Sequence 8193, Ap	933	28	57.1	518	2	US-09-329-418-4	Sequence 4, Appli
861	28	57.1	333	2	US-09-489-039A-8678	Sequence 8678, Ap	934	28	57.1	518	2	US-09-329-418-5	Sequence 5, Appli
862	28	57.1	333	2	US-09-489-039A-10506	Sequence 10506, A	935	28	57.1	518	2	US-09-329-418-9	Sequence 9, Appli
863	28	57.1	339	2	US-09-949-016-6274	Sequence 6274, Ap	936	28	57.1	518	2	US-09-329-418-9	Sequence 9, Appli
864	28	57.1	342	1	US-08-272-919-2	Sequence 2, Appli	937	28	57.1	518	2	US-09-531-914-3	Sequence 3, Appli
865	28	57.1	342	1	US-08-619-916-2	Sequence 2, Appli	938	28	57.1	518	2	US-09-531-914-5	Sequence 5, Appli
866	28	57.1	342	4	PCT-US95-08542-2	Sequence 2, Appli	939	28	57.1	518	2	US-09-531-914-9	Sequence 9, Appli
867	28	57.1	344	2	US-09-902-540-11081	Sequence 11081, A	940	28	57.1	518	2	US-09-771-161A-231	Sequence 231, App
868	28	57.1	345	2	US-09-902-540-12122	Sequence 12122, A	941	28	57.1	518	2	US-09-248-796A-18652	Sequence 18652, A
869	28	57.1	353	6	5340934-4	Patent No. 5340934	942	28	57.1	540	2	US-09-252-991A-19874	Sequence 19874, A
870	28	57.1	357	2	US-09-071-035-366	Sequence 366, App	943	28	57.1	544	2	US-09-270-767-6164	Sequence 61684, A
871	28	57.1	357	2	US-10-206-576-366	Sequence 366, App	944	28	57.1	545	2	US-09-902-540-10670	Sequence 10670, A
872	28	57.1	359	1	US-08-303-238-4	Sequence 4, Appli	945	28	57.1	550	2	US-09-949-016-10660	Sequence 10660, A
873	28	57.1	359	2	US-08-458-834-4	Sequence 4, Appli	946	28	57.1	555	2	US-08-948-669A-10	Sequence 10, Appli
874	28	57.1	359	2	US-09-134-000C-4630	Sequence 4630, Ap	947	28	57.1	560	1	US-09-188-469-10	Sequence 10, Appli
875	28	57.1	359	2	US-09-538-092-868	Sequence 868, App	948	28	57.1	560	1	US-08-983-945-4	Sequence 4, Appli
876	28	57.1	359	2	US-09-949-016-6143	Sequence 6143, Ap	949	28	57.1	560	2	US-09-397-228A-10	Sequence 10, Appli
877	28	57.1	360	2	US-09-020-743-2	Sequence 2, Appli	950	28	57.1	560	2	US-09-949-016-6744	Sequence 6744, Ap
878	28	57.1	360	2	US-09-949-016-7925	Sequence 7925, Ap	951	28	57.1	571	2	US-10-104-047-2414	Sequence 2414, Ap
879	28	57.1	360	2	US-10-089-787-2	Sequence 2, Appli	952	28	57.1	573	2	US-08-583-110-5242	Sequence 5242, Ap
880	28	57.1	361	1	US-08-415-751-3	Sequence 3, Appli	953	28	57.1	574	2	US-09-107-433-4211	Sequence 4211, Ap
881	28	57.1	365	2	US-10-101-464A-510	Sequence 510, App	954	28	57.1	574	2	US-09-949-002-497	Sequence 497, App
882	28	57.1	368	2	US-09-062-330-37	Sequence 37, Appli	955	28	57.1	579	2	US-09-529-279-4	Sequence 4, Appli
883	28	57.1	372	1	US-08-837-593-9	Sequence 9, Appli	956	28	57.1	579	2	US-10-158-895-4	Sequence 4, Appli
884	28	57.1	372	2	US-09-902-540-11748	Sequence 11748, A	957	28	57.1	589	2	US-09-328-352-6901	Sequence 6901, Ap
885	28	57.1	378	2	US-09-248-796A-20843	Sequence 20843, A	958	28	57.1	590	2	US-10-158-895-15	Sequence 15, Appli
886	28	57.1	385	2	US-09-489-039A-9422	Sequence 9422, Ap	959	28	57.1	590	2	US-09-446-100-21	Sequence 21, Appli
887	28	57.1	386	2	US-09-134-001C-5607	Sequence 5607, Ap	960	28	57.1	611	2	US-08-446-100-22	Sequence 22, Appli
888	28	57.1	386	2	US-09-419-679-10	Sequence 10, Appli	961	28	57.1	614	2	US-08-446-100-25	Sequence 25, Appli
889	28	57.1	387	1	US-08-837-593-4	Sequence 4, Appli	962	28	57.1	614	2	US-08-814-095-2	Sequence 2, Appli
890	28	57.1	391	2	US-09-949-016-9863	Sequence 9863, Ap	963	28	57.1	614	2	US-09-248-796A-20214	Sequence 20214, A
891	28	57.1	393	1	US-08-837-593-2	Sequence 2, Appli	964	28	57.1	602	2	US-09-106-330-39	Sequence 39, Appli
892	28	57.1	393	1	US-08-837-593-3	Sequence 3, Appli	965	28	57.1	602	2	US-07-733-962A-2	Sequence 2, Appli
893	28	57.1	393	2	US-09-134-001C-5594	Sequence 5594, Ap	966	28	57.1	614	1	US-08-370-156-2	Sequence 2, Appli
894	28	57.1	399	2	US-09-489-039A-9414	Sequence 9414, Ap	967	28	57.1	614	1	US-08-446-100-19	Sequence 19, Appli
895	28	57.1	405	2	US-09-489-039A-9992	Sequence 9992, Ap	968	28	57.1	614	2	US-08-446-100-20	Sequence 20, Appli
896	28	57.1	406	2	US-09-489-039A-12665	Sequence 12665, A	969	28	57.1	614	2	US-08-446-100-21	Sequence 21, Appli
897	28	57.1	412	2	US-09-202-918-2	Sequence 2, Appli	970	28	57.1	614	2	US-08-446-100-22	Sequence 22, Appli
898	28	57.1	418	2	US-09-743-742B-5	Sequence 5, Appli	971	28	57.1	614	2	US-08-446-100-23	Sequence 23, Appli
899	28	57.1	418	2	US-09-543-681A-7634	Sequence 7634, Ap	972	28	57.1	614	2	US-08-446-100-25	Sequence 25, Appli
900	28	57.1	418	2	US-09-710-279-1288	Sequence 1288, Ap	973	28	57.1	614	2	US-08-814-095-2	Sequence 2, Appli
901	28	57.1	418	2	US-09-826-509-535	Sequence 535, App	974	28	57.1	614	2	US-08-814-095-2	Sequence 2, Appli
902	28	57.1	419	2	US-09-630-155-2	Sequence 2, Appli	975	28	57.1	614	2	US-08-814-095-2	Sequence 2, Appli
903	28	57.1	420	2	US-09-329-418-8	Sequence 8, Appli	976	28	57.1	614	2	US-08-814-095-2	Sequence 2, Appli

977 28 57.1 614 4 PCT-US92-06106-2 Sequence 2, Appl1
978 28 57.1 617 1 US-08-370-156-6 Sequence 6, Appl1
979 28 57.1 617 2 US-08-814-095-6 Sequence 6, Appl1
980 28 57.1 624 2 US-08-422-108-1 Sequence 1, Appl1
981 28 57.1 624 2 US-08-422-734-1 Sequence 1, Appl1
982 28 57.1 633 2 US-09-949-016-9902 Sequence 9902, Ap
983 28 57.1 645 2 US-09-949-016-7063 Sequence 7063, Ap
984 28 57.1 645 2 US-09-949-016-7064 Sequence 7064, Ap
985 28 57.1 645 2 US-09-602-812A-13 Sequence 13, Appl
986 28 57.1 662 2 US-09-252-991A-24376 Sequence 24376, A
987 28 57.1 705 2 US-08-311-731A-4 Sequence 4, Appl1
988 28 57.1 722 1 US-08-158-232-51 Sequence 51, Appl
989 28 57.1 722 1 US-08-611-528-51 Sequence 51, Appl
990 28 57.1 722 2 US-09-173-891-51 Sequence 51, Appl
991 28 57.1 722 2 US-09-853-533A-10 Sequence 10, Appl
992 28 57.1 725 2 US-09-252-991A-21212 Sequence 21212, A
993 28 57.1 727 2 US-09-815-923-10 Sequence 10, Appl
994 28 57.1 731 2 US-09-708-426-12 Sequence 12, Appl
995 28 57.1 738 2 US-09-107-532A-5096 Sequence 5096, Ap
996 28 57.1 771 2 US-08-434-000A-8 Sequence 8, Appl1
997 28 57.1 771 2 US-09-312-157-8 Sequence 8, Appl1
998 28 57.1 771 2 US-09-717-888-8 Sequence 8, Appl1
999 28 57.1 771 2 US-09-818-247-4 Sequence 4, Appl1
1000 28 57.1 782 1 US-09-146-283-4 Sequence 4, Appl1

ALIGNMENTS

RESULT 1
US-09-169-425C-21
Sequence 21, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janie K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

US-09-169-425C-21

Query Match 100.0%; Score 49; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4,6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCP1 9
|||||
Db 1 GTIGIVCP1 9

RESULT 2
US-08-197-484-70
Sequence 70, Application US/08197484
Patent No. 6419931

GENERAL INFORMATION:

APPLICANT: VITIELLO, Maria A.

APPLICANT: CHESTNUT, Robert W.

APPLICANT: SETTE, Alessandro D.

APPLICANT: CELIS, Esben

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING

NUMBER OF SEQUENCES: 153

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend Knourie and Crew

STREET: Steuart Street Tower, One Market Plaza

CITY: San Francisco

STATE: California

COUNTRY: US

ZIP: 94105-1493

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/197,484

CLASSIFICATION: 424

FILING DATE: 16-FEB-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/935,811

FILING DATE: 26-AUG-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/827,682

FILING DATE: 29-JAN-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/749,568

FILING DATE: 26-AUG-1991

ATTORNEY/AGENT INFORMATION:

NAME: Parmelee, Steven W.

REGISTRATION NUMBER: 31,990

REFERENCE/DOCKET NUMBER: 14137-26-4

TELECOMMUNICATION INFORMATION:

TELEPHONE: (206) 467-9600

TELEFAX: (206) 623-6793

INFORMATION FOR SEQ ID NO: 70:

SEQUENCE CHARACTERISTICS:

LENGTH: 9 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: peptide

QY 1 GTIGIVCP1 9
Query Match 100.0%; Score 49; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4,6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 GTLGIVCPI 9

RESULT 3

US-09-759-960-21
; Sequence 21, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: PasteSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Frazer, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-759-960-21

Query Match 100.0%; Score 49; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GTLGIVCPI 9
Db 1 GTLGIVCPI 9

RESULT 4

US-10-365-908-50
; Sequence 50, Application US/10365908
; Patent No. 6797491
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13

; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: PasteSeq for Windows Version 4.0
; SEQ ID NO 50
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
; US-10-365-908-50

Query Match 100.0%; Score 49; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GTLGIVCPI 9
Db 1 GTLGIVCPI 9

RESULT 5

PCT-US95-02121-70
; Sequence 70, Application PC/TUS9502121
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; TITLE OF INVENTION: CTL IMMUNITY
; NUMBER OF SEQUENCES: 153
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/02121
; FILING DATE: 16-FEB-1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/197,484
; FILING DATE: 16-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/935,811
; FILING DATE: 26-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/874,491
; FILING DATE: 27-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/749,568
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 14137-26-4PC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 467-9600
; TELEFAX: (415) 543-5043
; INFORMATION FOR SEQ ID NO: 70:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; PCT-US95-02121-70

Query Match 100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
| | | | |
| | | | |
Db 1 GTLGIVCPI 9

RESULT 6

US-09-000-003A-9
; Sequence 9, Application US/09000003A
; Patent No. 6652850
; GENERAL INFORMATION:
; APPLICANT: Philip, Ramla
; lebkowetz, Jane S.
; TITLE OF INVENTION: ADENO-ASSOCIATED VIRAL LIPOSOMES AND
; THEIR USE IN TRANSFECTING DENDRITIC CELLS TO STIMULATE
; SPECIFIC IMMUNITY
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Alexis Barron, Esq.
; STREET: Suite 2600 Aramark Tower, 1101 Market Street
; CITY: Philadelphia
; STATE: PA
; COUNTRY: United States of America
; ZIP: 19107
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/000,003A
; FILING DATE: 15-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/12012
; FILING DATE: 19-JUL-1996
; APPLICATION NUMBER: US 60/001,312
; FILING DATE: 21-JUL-1995
; APPLICATION NUMBER: US 60/007,184
; FILING DATE: 01-NOV-1995
; APPLICATION NUMBER: US 08/566,286
; FILING DATE: 01-DEC-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Barron, Alexis
; REGISTRATION NUMBER: 22,702
; REFERENCE/DOCKET NUMBER: 20,846-K USA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (215) 923-4466
; TELEFAX: (215) 923-2189
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 9:
US-09-000-003A-9

Query Match 100.0%; Score 49; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
| | | | |
| | | | |
Db 1 GTLGIVCPI 9

RESULT 7
US-09-405-986A-10
; Sequence 10, Application US/09405986A
; Patent No. 6676946
; GENERAL INFORMATION:
; APPLICANT: Bay, Sylvie

; APPLICANT: Cantacuzene, Daniele
; APPLICANT: Leclerc, Claude
; APPLICANT: Lo-Man, Richard
; TITLE OF INVENTION: MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,
; TITLE OF INVENTION: VACCINE COMPRISING THE SAME AND USE THEREOF
; FILE REFERENCE: 102,166A-1
; CURRENT APPLICATION NUMBER: US/09/405,986A
; CURRENT FILING DATE: 2002-06-11
; PRIOR APPLICATION NUMBER: US 09/049,847
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: US 60/041,726
; PRIOR FILING DATE: 1997-03-27
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 10
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
; FEATURE:
; NAME/KEY: MISC FEATURE
; OTHER INFORMATION: HPV16 E7 PEPTIDE
US-09-405-986A-10

Query Match 100.0%; Score 49; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
| | | | |
| | | | |
Db 1 GTLGIVCPI 9

RESULT 8
US-10-365-908-46
; Sequence 46, Application US/10365908
; Patent No. 6797491
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for windows Version 4.0
; SEQ ID NO 46
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-46

Query Match 100.0%; Score 49; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.015;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
| | | | |
| | | | |
Db 2 GTLGIVCPI 10

RESULT 9
US-09-169-425C-31
; Sequence 31, Application US/09169425C
; Patent No. 6183746
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.

```

; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows95
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Other
; LOCATION: 1...1
; OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
; OTHER INFORMATION: Arg, Lys, Gly, Gln, Asp, or Glu
; US-09-169-425C-31
;
; Query Match 100.0%; Score 49; DB 2; Length 11;
; Best Local Similarity 100.0%; Pred. No. 0.016;
; Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 1 GTLGIVCPI 9
; DB 2 GTLGIVCPI 10
;
; RESULT 10
; US-09-169-425C-33
; Sequence 33, Application US/09169425C
; Patent No. 6183746
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
```

```

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows95
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-169-425C-33
;
; Query Match 100.0%; Score 49; DB 2; Length 11;
; Best Local Similarity 100.0%; Pred. No. 0.016;
; Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 1 GTLGIVCPI 9
; DB 2 GTLGIVCPI 10
;
; RESULT 11
; US-09-759-960-31
; Sequence 31, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows95
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
```

```

;
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 11 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Other
; LOCATION: 1...1
; OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
; OTHER INFORMATION: Arg, Lys, Gly, Gln, Asp, or Glu
US-09-759-960-31

Query Match          100.0%; Score 49; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 12
US-09-759-960-33
; Sequence 33, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 11 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-759-960-33

Query Match          100.0%; Score 49; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 13
US-08-948-378A-16
; Sequence 16, Application US/08948378A
; Patent No. 6013258
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
; TITLE OF INVENTION: THE HPV E7 PROTEIN
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/948,378A
; FILING DATE: 09-OCT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 12 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-948-378A-16

Query Match          100.0%; Score 49; DB 2; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.018;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 3 GTLGIVCPI 11

RESULT 14
US-09-169-425C-16
; Sequence 16, Application US/09169425C
; Patent No. 6183746
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
```


ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-16

Query Match 100.0%; Score 49; DB 2; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.018;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GTLGI VCP I 9
|||
Db 3 GTLGI VCP I 11

RESULT 15
US-09-759-960-16
Sequence 16, Application US/09759960
Patent No. 6582704
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:

NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-16

Query Match 100.0%; Score 49; DB 2; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.018;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GTLGI VCP I 9
|||
Db 3 GTLGI VCP I 11

RESULT 16
US-08-948-378A-3
Sequence 3, Application US/08948378A
Patent No. 6013258
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/948,378A
FILING DATE: 09-OCT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-948-378A-3

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGI VCP1 9
|||||
Db 4 GTLGI VCP1 12

RESULT 17
US-08-948-378A-4
Sequence 4, Application US/08948378A
Patent No. 6013258
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chiciz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/948.378A
FILING DATE: 09-OCT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-948-378A-4
Query Match 100.0%; Score 49; DB 2; length 13;
Best local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GTLGI VCP1 9
|||||
Db 4 GTLGI VCP1 12

RESULT 18
US-08-948-378A-19
Sequence 19, Application US/08948378A
Patent No. 6013258
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chiciz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
NUMBER OF SEQUENCES: 19

CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/948.378A
FILING DATE: 09-OCT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Coding Sequence
LOCATION: 1...1
OTHER INFORMATION: where X at position 1 is Ala, Ser, Arg, Lys,
OTHER INFORMATION: Gly, Gln, Asp, or Glu
US-08-948-378A-19
Query Match 100.0%; Score 49; DB 2; length 13;
Best local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GTLGI VCP1 9
|||||
Db 4 GTLGI VCP1 12

RESULT 19
US-08-159-339A-1167
Sequence 1167, Application US/08159339A
Patent No. 6037135
GENERAL INFORMATION:
APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esben
TITLE OF INVENTION: HLA Binding peptides and their
NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth floor
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
TELEX:
INFORMATION FOR SEQ ID NO: 1167:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-159-339A-1167

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCP1 9
Db 1 GTLGIVCP1 9

RESULT 20
US-09-169-425C-3
Sequence 3, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906

TELEX: 200154
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-3

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCP1 9
Db 4 GTLGIVCP1 12

RESULT 21
US-09-169-425C-4
Sequence 4, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-4

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCP1 9
Db 4 GTLGIVCP1 12

```
RESULT 22
US-09-169-425C-19
; Sequence 19, Application US/09169425C
; Patent No. 6183746
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Other
; LOCATION: 1..1
; OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
; OTHER INFORMATION: Arg, Lys, Gly, Gln, Asp, or Glu
US-09-169-425C-19

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIIVCP1 9
Db 4 GTLGIIVCP1 12

RESULT 23
US-09-759-960-3
; Sequence 3, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-759-960-3

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-759-960-3

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIIVCP1 9
Db 4 GTLGIIVCP1 12

RESULT 24
US-09-759-960-4
; Sequence 4, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
```

NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-4

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTIGIVCP1 9
Db 4 GTIGIVCP1 12

RESULT 25
US-09-759-960-19
Sequence 19, Application US/09759960
Patent No. 6582704
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Other
LOCATION: 1...1
OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
OTHER INFORMATION: Arg, Lys, Gly, Gln, Asp, or Glu

US-09-759-960-19

Query Match 100.0%; Score 49; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.02; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTIGIVCP1 9
Db 4 GTIGIVCP1 12

RESULT 26
US-09-169-425C-32
Sequence 32, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-32

Query Match 100.0%; Score 49; DB 2; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.021; Indels 0; Gaps 0;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTIGIVCP1 9
Db 2 GTIGIVCP1 10

RESULT 27
US-09-759-960-32
Sequence 32, Application US/09759960
Patent No. 6582704
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.

APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-32

Query Match 100.0%; Score 49; DB 2; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.021;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 28
US-08-159-339A-1168
Sequence 1168, Application US/08159339A
Patent No. 6037135
GENERAL INFORMATION:
APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esben
TITLE OF INVENTION: HLA Binding peptides and Their
TITLE OF INVENTION: Uses
NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
TELEX:
INFORMATION FOR SEQ ID NO: 1168:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-159-339A-1168

Query Match 100.0%; Score 49; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.023;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 3 GTLGIVCPI 11

RESULT 29
US-09-169-425C-25
Sequence 25, Application US/09169425C
Patent No. 6183746
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906

TELEX: 200154
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-169-425C-25

Query Match 100.0%; Score 49; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.024;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 30
US-09-759-960-25
Sequence 25, Application US/09759960
Patent No. 6582704
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-25

Query Match 100.0%; Score 49; DB 2; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.024;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 31
US-09-980-523A-18
Sequence 18, Application US/09980523A
Patent No. 6783763
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 AND E7
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: WO/91/00119
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR 99/07012
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 18
LENGTH: 19
TYPE: PRT
ORGANISM: Human Papillomavirus
US-09-980-523A-18

Query Match 100.0%; Score 49; DB 2; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.029;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 7 GTLGIVCPI 15

RESULT 32
US-08-075-541D-50
Sequence 50, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZ JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2298
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU Pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/AU91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363

REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-50

Query Match 100.0%; Score 49; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCP1 9
DB 11 GTIGIVCP1 19

RESULT 33
US-08-934-915-50
Sequence 50, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-50

Query Match 100.0%; Score 49; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCP1 9
DB 8 GTIGIVCP1 16

RESULT 34
US-08-934-915-157
Sequence 157, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEE-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
TITLE OF INVENTION: DIAGNOSTIC PURPOSES
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934,915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/949,836
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOUISE A. Foutch
REGISTRATION NUMBER: 37,133
REFERENCE/DOCKET NUMBER: 1946.6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 813-538-3800
TELEFAX: 813-538-3820
TELEX:
INFORMATION FOR SEQ ID NO: 157:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-934-915-157

Query Match 100.0%; Score 49; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCP1 9
DB 8 GTIGIVCP1 16

RESULT 35
US-09-980-177A-76
Sequence 76, Application US/09980177A
Patent No. 6838084
GENERAL INFORMATION:
APPLICANT: Jochmus, Ingrid
APPLICANT: Nieland, John
TITLE OF INVENTION: Cytotoxic T-cell Epitopes of the
TITLE OF INVENTION: Papilloma Virus L1-Protein and Use Thereof in Diagnosis and
TITLE OF INVENTION: Therapy

FILE REFERENCE: 50125/036001
CURRENT APPLICATION NUMBER: US/09/980.177A
CURRENT FILING DATE: 2001-11-29
PRIOR APPLICATION NUMBER: PCT/EP00/05006
PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: DE 19925199.1
PRIOR FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 77
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 76
LENGTH: 21
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-09-980-177A-76

Query Match 100.0%; Score 49; DB 2; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.032;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIIVCPI 9
Db 8 GTLGIIVCPI 16

RESULT 36
US-08-075-541D-40
Sequence 40, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESSES:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075.541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 40:
SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-075-541D-40

Query Match 100.0%; Score 49; DB 2; Length 26;
Best Local Similarity 100.0%; Pred. No. 0.04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIIVCPI 9
Db 14 GTLGIIVCPI 22

RESULT 37
US-09-486-394-5
Sequence 5, Application US/09486394
Patent No. 6478749
GENERAL INFORMATION:
APPLICANT: HOPFL, Reinhard
TITLE OF INVENTION: Diagnostic Kit for Skin Tests, and Method
FILE REFERENCE: 032929-001
CURRENT APPLICATION NUMBER: US/09/486.394
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/04773
PRIOR FILING DATE: 1998-07-30
PRIOR APPLICATION NUMBER: DE 197 37 409.3
PRIOR FILING DATE: 1997-08-27
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.1
SEQ ID NO 5
LENGTH: 28
TYPE: PRT
ORGANISM: Human papillomavirus type 16
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(28)
OTHER INFORMATION: E7 peptide.
US-09-486-394-5

Query Match 100.0%; Score 49; DB 2; Length 28;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIIVCPI 9
Db 15 GTLGIIVCPI 23

RESULT 38
US-08-934-915-54
Sequence 54, Application US/08934915
Patent No. 5932412
GENERAL INFORMATION:
APPLICANT: DILLNER, JOAKIM
APPLICANT: DILLNER, LENA
APPLICANT: CHENG, HWEI-MING
TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN
TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,
TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,
TITLE OF INVENTION: USEFUL IN IMMUNOASSAY FOR
NUMBER OF SEQUENCES: 193
CORRESPONDENCE ADDRESSES:
ADDRESSEE: MASON & ASSOCIATES, P.A.
STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500
CITY: CLEARWATER
STATE: FLORIDA
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Windows 3.0
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/934.915
FILING DATE: 22-SEP-1997
CLASSIFICATION: 435

```
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/949,836
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: LOUISE A. Foutch
; REGISTRATION NUMBER: 37,133
; REFERENCE/DOCKET NUMBER: 1946.6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 813-538-3800
; TELEFAX: 813-538-3820
; TELEX:
; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-934-915-54

Query Match          100.0%; Score 49; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 0.046;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCPI 9
DB 17 GTIGIVCPI 25

RESULT 39
US-08-948-378A-6
; Sequence 6, Application US/08948378A
; Patent No. 6013258
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicx, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM
; TITLE OF INVENTION: THE HPV E7 PROTEIN
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/948,378A
; FILING DATE: 09-OCT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 38 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: Internal
```

```
US-08-948-378A-6

Query Match          100.0%; Score 49; DB 2; Length 38;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCPI 9
DB 29 GTIGIVCPI 37

RESULT 40
US-09-169-425C-6
; Sequence 6, Application US/09169425C
; Patent No. 6183746
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicx, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 38 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: Internal
; US-09-169-425C-6

Query Match          100.0%; Score 49; DB 2; Length 38;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTIGIVCPI 9
DB 29 GTIGIVCPI 37

RESULT 41
US-09-759-960-6
; Sequence 6, Application US/09759960
; Patent No. 6582704
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
```

APPLICANT: Chicx, Roman M.
APPLICANT: Colline, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 38 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-759-960-6

Query Match 100.0%; Score 49; DB 2; Length 38;
Best Local Similarity 100.0%; Pred. No. 0.058;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GTIGIVCPI 9
Db 29 GTIGIVCPI 37

RESULT 42
US-08-406-248-6
Sequence 6, Application US/08406248
Patent No. 5736318
GENERAL INFORMATION:
APPLICANT: Munger, Karl
APPLICANT: Jones, D. Leanne
TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
TITLE OF INVENTION: TRANSFORMED CELLS
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ann-Louise Kerner, Ph.D., Lappin & Kusner
STREET: 200 State Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/406,248
FILING DATE:
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: McDaniel, Patricia A.
REGISTRATION NUMBER: 33,194
REFERENCE/DOCKET NUMBER: HAZ-011
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-406-248-6

Query Match 100.0%; Score 49; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GTIGIVCPI 9
Db 85 GTIGIVCPI 93

RESULT 43
US-08-075-541D-42
Sequence 42, Application US/08075541D
Patent No. 6183745
GENERAL INFORMATION:
APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FRAZER, IAN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE AND
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: 1601 MARKET STREET, 36TH FLOOR
CITY: PHILADELPHIA
STATE: PENNSYLVANIA
COUNTRY: USA
ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: AU pk 3876
FILING DATE: 12-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: pcc/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: NADEL, ALAN S
REGISTRATION NUMBER: 27,363
REFERENCE/DOCKET NUMBER: 8795-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO: 42:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide
US-08-075-541D-42

Query Match 100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 85 GTLGIVCPI 93

RESULT 44
US-09-382-616A-1
Sequence 1, Application US/09382616A
Patent No. 6200746
GENERAL INFORMATION:
APPLICANT: Fisher, Christopher
APPLICANT: He, Wanxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/5216
CURRENT APPLICATION NUMBER: US/09/382,616A
CURRENT FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-382-616A-1

Query Match 100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 85 GTLGIVCPI 93

RESULT 45
US-08-944-368A-4
Sequence 4, Application US/08944368A
Patent No. 6228368
GENERAL INFORMATION:
APPLICANT: Giesman, et al.
TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine
TITLE OF INVENTION: Formulations and Methods of Use
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Borun
STREET: 233 South Wacker Drive, 6300 Sears Tower
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/944,368A
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 27013/34028
TELECOMMUNICATION INFORMATION:

TELEPHONE: 312-474-6300
TELEFAX: 312-474-0448
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-944-368A-4

Query Match 100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 85 GTLGIVCPI 93

RESULT 46
US-09-820-764-4
Sequence 4, Application US/09820764
Patent No. 6352696
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HAUER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,764
FILING DATE: 30-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:

US-09-820-764-4

Query Match 100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 85 GTLGIVCPI 93

```
RESULT 47
US-09-613-303-8
; Sequence 8, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
; APPLICANT: Chu, N. Randall
; APPLICANT: Mizzen, Lee A.
; TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT APPLICATION NUMBER: US/09/613,303
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
US-09-613-303-8

Query Match      100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GTLGIVCPI 9
        |||||
Db      85 GTLGIVCPI 93

RESULT 48
US-09-566-420-19
; Sequence 19, Application US/09566420
; Patent No. 6500641
; GENERAL INFORMATION:
; APPLICANT: CHEN, SI-YI AND ZHAOYANG, YOU
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ANTIGENS WHICH ELICIT AN
; TITLE OF INVENTION: IMMUNE RESPONSE
; FILE REFERENCE: TBA
; CURRENT APPLICATION NUMBER: US/09/566,420
; CURRENT FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: 60/132,752
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: 60/132,750
; PRIOR FILING DATE: 1999-05-06
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Human Papillomavirus type E7
US-09-566-420-19

Query Match      100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GTLGIVCPI 9
        |||||
Db      85 GTLGIVCPI 93

RESULT 49
US-09-986-118A-4
; Sequence 4, Application US/09986118A
; Patent No. 6562351
; GENERAL INFORMATION:
; APPLICANT: BURGER, Alexander
; APPLICANT: HALLER, Michael
; TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
```

```
FORMULATIONS AND METHODS OF USE
;
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/986,118A
; FILING DATE: 07-No. 6562351-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/026,896
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Sandercock, Colin G.
; REGISTRATION NUMBER: 31,298
; REFERENCE/DOCKET NUMBER: 37067/102
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 98 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULAR TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-986-118A-4

Query Match      100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GTLGIVCPI 9
        |||||
Db      85 GTLGIVCPI 93

RESULT 50
US-09-728-466-1
; Sequence 1, Application US/09728466
; Patent No. 6641994
; GENERAL INFORMATION:
; APPLICANT: Fisher, Christopher
; APPLICANT: He, Manxia
; TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
; FILE REFERENCE: 28341/6216
; CURRENT APPLICATION NUMBER: US/09/728,466
; CURRENT FILING DATE: 2000-12-01
; PRIOR APPLICATION NUMBER: 09/382,616
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1

Query Match      100.0%; Score 49; DB 2; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GTLGIVCPI 9
        |||||
```

Tue May 9 09:28:12 2006

us-08-170-344-19.ra1

Page 26

Db 85 GTIGIVCPI 93

Search completed: May 5, 2006, 05:36:27
Job time : 24.7 sec

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocelebration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:29:07 ; Search time 56 Seconds
(without alignments)
67.151 Million cell updates/sec

Title: US-08-170-344-19
Perfect score: 49
Sequence: 1 GTGIVCP1 9

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published Applications_AA_Main:
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	49	100.0	9	3	US-09-759-960-21
2	49	100.0	9	3	US-09-891-823-50
3	49	100.0	9	4	US-10-128-711-70
4	49	100.0	9	4	US-10-365-908-50
5	49	100.0	9	4	US-10-472-661-9
6	49	100.0	9	4	US-10-777-053-327
7	49	100.0	9	4	US-10-777-053-484
8	49	100.0	9	4	US-10-837-217-327
9	49	100.0	9	4	US-10-837-217-494
10	49	100.0	9	5	US-10-603-062-21
11	49	100.0	9	5	US-10-871-138-50
12	49	100.0	9	5	US-10-751-845-104
13	49	100.0	10	3	US-09-891-823-46
14	49	100.0	10	3	US-09-888-721-8
15	49	100.0	10	4	US-10-365-908-46
16	49	100.0	10	4	US-10-668-400-10
17	49	100.0	10	5	US-10-871-138-46
18	49	100.0	10	5	US-10-484-063-18
19	49	100.0	11	3	US-09-759-960-31
20	49	100.0	11	3	US-09-759-960-33
21	49	100.0	11	5	US-10-603-062-31
22	49	100.0	11	5	US-10-603-062-33
23	49	100.0	12	3	US-09-759-960-16
24	49	100.0	12	3	US-09-909-460-108
25	49	100.0	12	3	US-09-872-836-108
26	49	100.0	12	5	US-10-603-062-16
27	49	100.0	12	5	US-10-758-970-108

28	49	100.0	12	5	US-10-751-845-62	Sequence 62, Appl
29	49	100.0	13	3	US-09-759-960-3	Sequence 3, Appl
30	49	100.0	13	3	US-09-759-960-4	Sequence 4, Appl
31	49	100.0	13	3	US-09-759-960-19	Sequence 19, Appl
32	49	100.0	13	3	US-09-909-460-110	Sequence 110, App
33	49	100.0	13	3	US-09-872-836-110	Sequence 3, Appl
34	49	100.0	13	5	US-10-603-062-3	Sequence 4, Appl
35	49	100.0	13	5	US-10-603-062-4	Sequence 19, Appl
36	49	100.0	13	5	US-10-603-062-19	Sequence 32, Appl
37	49	100.0	14	3	US-09-759-960-32	Sequence 32, Appl
38	49	100.0	14	5	US-10-603-062-32	Sequence 71, Appl
39	49	100.0	15	4	US-10-648-547-71	Sequence 84, Appl
40	49	100.0	15	4	US-10-648-547-84	Sequence 71, Appl
41	49	100.0	15	4	US-10-476-570-52	Sequence 52, Appl
42	49	100.0	15	4	US-10-306-541-71	Sequence 71, Appl
43	49	100.0	15	4	US-10-306-541-84	Sequence 84, Appl
44	49	100.0	16	3	US-09-759-960-25	Sequence 25, Appl
45	49	100.0	16	3	US-09-909-460-109	Sequence 109, App
46	49	100.0	16	3	US-09-872-836-109	Sequence 25, Appl
47	49	100.0	16	5	US-10-603-062-25	Sequence 109, App
48	49	100.0	16	5	US-10-758-970-109	Sequence 69, Appl
49	49	100.0	17	5	US-10-751-845-69	Sequence 58, Appl
50	49	100.0	19	4	US-10-476-570-58	Sequence 18, Appl
51	49	100.0	19	5	US-10-858-384-18	Sequence 19, Appl
52	49	100.0	20	5	US-10-484-063-19	Sequence 51, Appl
53	49	100.0	21	4	US-10-432-465-51	Sequence 18, Appl
54	49	100.0	21	4	US-10-476-570-18	Sequence 76, Appl
55	49	100.0	21	5	US-10-890-526-76	Sequence 6, Appl
56	49	100.0	38	5	US-09-759-960-6	Sequence 6, Appl
57	49	100.0	38	5	US-10-603-062-6	Sequence 1, Appl
58	49	100.0	98	3	US-09-728-466-1	Sequence 4, Appl
59	49	100.0	98	3	US-09-820-765-4	Sequence 4, Appl
60	49	100.0	98	3	US-09-824-017-4	Sequence 4, Appl
61	49	100.0	98	3	US-09-986-118A-4	Sequence 8, Appl
62	49	100.0	98	4	US-10-267-311-8	Sequence 8, Appl
63	49	100.0	98	4	US-10-177-390-8	Sequence 19, Appl
64	49	100.0	98	4	US-10-201-764-19	Sequence 29, Appl
65	49	100.0	98	4	US-10-392-113-29	Sequence 4, Appl
66	49	100.0	98	4	US-10-654-129-4	Sequence 19, Appl
67	49	100.0	98	4	US-10-681-410-19	Sequence 5, Appl
68	49	100.0	98	4	US-10-772-988-3	Sequence 3, Appl
69	49	100.0	98	4	US-10-479-541-5	Sequence 4, Appl
70	49	100.0	98	5	US-10-042-526A-4	Sequence 1, Appl
71	49	100.0	98	5	US-10-657-399-1	Sequence 12, Appl
72	49	100.0	98	5	US-10-858-384-12	Sequence 26, Appl
73	49	100.0	98	5	US-10-484-063-26	Sequence 5, Appl
74	49	100.0	98	5	US-10-343-448-5	Sequence 8, Appl
75	49	100.0	98	5	US-10-679-956-8	Sequence 17, Appl
76	49	100.0	98	5	US-10-367-057-17	Sequence 7, Appl
77	49	100.0	98	6	US-11-077-939-5	Sequence 4, Appl
78	49	100.0	111	4	US-10-115-440-7	Sequence 12, Appl
79	49	100.0	117	5	US-10-751-845-126	Sequence 35, Appl
80	49	100.0	121	5	US-10-267-311-12	Sequence 12, Appl
81	49	100.0	121	5	US-10-679-966-12	Sequence 2, Appl
82	49	100.0	185	6	US-11-072-288-2	Sequence 35, Appl
83	49	100.0	185	6	US-10-267-311-35	Sequence 35, Appl
84	49	100.0	198	4	US-10-679-956-35	Sequence 1, Appl
85	49	100.0	198	5	US-10-000-993-1	Sequence 8, Appl
86	49	100.0	220	4	US-10-000-993-8	Sequence 1, Appl
87	49	100.0	220	4	US-10-899-771-8	Sequence 8, Appl
88	49	100.0	220	5	US-10-899-771-8	Sequence 157, App
89	49	100.0	220	5	US-10-899-771-8	Sequence 158, App
90	49	100.0	236	5	US-10-751-845-157	Sequence 12, Appl
91	49	100.0	237	5	US-10-751-845-158	Sequence 12, Appl
92	49	100.0	239	5	US-10-000-993-12	Sequence 160, App
93	49	100.0	261	5	US-10-899-771-12	Sequence 1, Appl
94	49	100.0	266	3	US-09-367-399A-1	Sequence 5, Appl
95	49	100.0	289	4	US-10-115-440-5	Sequence 33, Appl
96	49	100.0	295	4	US-10-267-311-33	Sequence 25, Appl
97	49	100.0	324	5	US-10-679-956-33	Sequence 25, Appl
98	49	100.0	324	5	US-10-267-311-25	Sequence 25, Appl
99	49	100.0	324	5	US-10-679-956-25	Sequence 25, Appl
100	49	100.0	324	5	US-10-679-956-25	Sequence 25, Appl

101	49	100.0	334	4	US-10-472-724-10	Sequence 10, Appl	174	38	77.6	9	4	US-10-777-053-548	Sequence 548, App
102	49	100.0	371	4	US-10-000-903-6	Sequence 6, Appl1	175	38	77.6	9	4	US-10-837-217-548	Sequence 548, App
103	49	100.0	371	5	US-10-899-771-6	Sequence 6, Appl1	176	38	77.6	9	5	US-10-871-138-21	Sequence 21, Appl1
104	49	100.0	390	4	US-10-000-903-14	Sequence 14, Appl1	177	38	77.6	9	5	US-10-751-845-100	Sequence 100, App
105	49	100.0	390	5	US-10-899-771-14	Sequence 14, Appl1	178	38	77.6	9	5	US-10-924-377-17	Sequence 17, Appl1
106	49	100.0	431	4	US-10-267-770-7	Sequence 7, Appl1	179	38	77.6	10	5	US-10-751-845-107	Sequence 107, App
107	49	100.0	433	4	US-10-267-311-19	Sequence 19, Appl1	180	38	77.6	11	3	US-09-759-960-28	Sequence 28, Appl1
108	49	100.0	433	5	US-10-679-956-19	Sequence 19, Appl1	181	38	77.6	11	5	US-10-603-062-28	Sequence 28, Appl1
109	49	100.0	639	5	US-10-267-311-17	Sequence 17, Appl1	182	38	77.6	15	4	US-10-648-547-95	Sequence 95, Appl1
110	49	100.0	639	5	US-10-679-956-17	Sequence 17, Appl1	183	38	77.6	15	4	US-10-476-570-51	Sequence 51, Appl1
111	49	100.0	641	4	US-10-267-311-51	Sequence 51, Appl1	184	38	77.6	15	4	US-10-306-541-95	Sequence 95, Appl1
112	49	100.0	641	5	US-10-679-956-51	Sequence 51, Appl1	185	38	77.6	79	4	US-10-312-273-207	Sequence 207, App
113	49	100.0	647	4	US-10-267-311-53	Sequence 53, Appl1	186	38	77.6	183	4	US-10-112-273-1251	Sequence 207, App
114	49	100.0	647	5	US-10-679-956-53	Sequence 53, Appl1	187	38	77.6	185	4	US-10-425-115-314970	Sequence 314970, A
115	49	100.0	648	4	US-10-267-311-29	Sequence 29, Appl1	188	38	77.6	187	4	US-10-425-115-314970	Sequence 314970, A
116	49	100.0	648	5	US-10-679-956-29	Sequence 29, Appl1	189	38	77.6	550	4	US-10-425-114-63068	Sequence 157415, A
117	49	100.0	711	4	US-10-267-311-41	Sequence 41, Appl1	190	38	77.6	1139	4	US-10-425-114-63068	Sequence 4, Appl1
118	49	100.0	711	5	US-10-679-956-41	Sequence 41, Appl1	191	38	77.6	1139	5	US-10-419-026-4	Sequence 4, Appl1
119	49	100.0	724	4	US-10-267-311-45	Sequence 45, Appl1	192	38	77.6	2703	6	US-10-746-237-4	Sequence 4, Appl1
120	49	100.0	724	5	US-10-679-956-45	Sequence 45, Appl1	193	37	75.5	154	4	US-10-425-114-44122	Sequence 44122, A
121	49	100.0	805	4	US-10-367-095-9	Sequence 9, Appl1	194	37	75.5	154	5	US-10-450-763-54278	Sequence 54278, A
122	49	100.0	805	4	US-10-368-046-9	Sequence 9, Appl1	195	37	75.5	179	3	US-09-919-039-130	Sequence 130, App
123	49	100.0	805	4	US-10-367-367-9	Sequence 9, Appl1	196	37	75.5	179	4	US-10-335-009-10	Sequence 10, Appl1
124	49	100.0	805	5	US-10-918-337-9	Sequence 9, Appl1	197	37	75.5	433	4	US-10-287-274-412	Sequence 412, App
125	45	91.8	9	5	US-10-924-377-18	Sequence 18, Appl1	198	37	75.5	433	4	US-10-282-122A-42701	Sequence 42701, A
126	45	91.8	11	4	US-10-472-661-7	Sequence 7, Appl1	199	37	75.5	463	3	US-09-915-181A-8	Sequence 8, Appl1
127	45	91.8	15	4	US-10-648-547-75	Sequence 75, Appl1	200	37	75.5	728	5	US-10-450-763-46363	Sequence 46363, A
128	45	91.8	15	4	US-10-306-541-75	Sequence 75, Appl1	201	37	75.5	893	6	US-11-097-141-16527	Sequence 16537, A
129	43	87.8	8	3	US-09-759-960-20	Sequence 20, Appl1	202	37	75.5	1010	4	US-10-369-493-6805	Sequence 6805, App
130	43	87.8	8	3	US-09-835-853-21	Sequence 21, Appl1	203	37	75.5	2317	4	US-10-190-115-26	Sequence 26, Appl1
131	43	87.8	8	3	US-09-909-460-107	Sequence 107, App	204	37	75.5	2317	5	US-10-369-072-26	Sequence 26, Appl1
132	43	87.8	8	3	US-09-872-836-107	Sequence 107, App	205	37	75.5	2318	5	US-10-631-467-1548	Sequence 1548, App
133	43	87.8	8	4	US-10-106-487-20	Sequence 20, Appl1	206	37	75.5	2321	4	US-10-356-625-2	Sequence 2, Appl1
134	43	87.8	8	4	US-10-133-210-276	Sequence 276, App	207	37	75.5	2321	4	US-10-408-765A-1634	Sequence 1634, App
135	43	87.8	8	4	US-10-465-811-89	Sequence 89, Appl1	208	37	75.5	2221	5	US-10-631-467-822	Sequence 822, App
136	43	87.8	8	4	US-10-388-337-20	Sequence 20, Appl1	209	36	73.5	8	5	US-09-759-960-26	Sequence 26, Appl1
137	43	87.8	8	4	US-10-472-661-8	Sequence 8, Appl1	210	36	73.5	8	5	US-10-603-062-26	Sequence 26, App
138	43	87.8	8	4	US-10-777-053-544	Sequence 544, App	211	36	73.5	92	4	US-10-425-115-20644	Sequence 20644, A
139	43	87.8	8	4	US-10-837-217-544	Sequence 544, App	212	36	73.5	192	4	US-10-425-115-363614	Sequence 363614, A
140	43	87.8	8	5	US-10-603-062-20	Sequence 20, Appl1	213	36	73.5	217	4	US-10-369-493-16842	Sequence 16842, A
141	43	87.8	8	5	US-10-758-970-107	Sequence 107, App	214	36	73.5	304	4	US-10-437-963-174473	Sequence 174473, A
142	43	87.8	8	5	US-10-751-845-61	Sequence 61, App	215	36	73.5	359	4	US-10-106-698-5926	Sequence 5926, App
143	43	87.8	8	5	US-10-776-521B-365	Sequence 365, App	216	36	73.5	365	4	US-10-767-701-40065	Sequence 40065, A
144	43	87.8	8	5	US-10-820-067A-876	Sequence 876, App	217	36	73.5	503	4	US-10-424-559-281804	Sequence 281804, A
145	43	87.8	9	3	US-09-759-960-2	Sequence 2, Appl1	218	36	73.5	563	4	US-10-149-310-236	Sequence 236, App
146	43	87.8	9	3	US-09-759-960-27	Sequence 27, Appl1	219	35.5	72.4	204	4	US-10-104-04-47-2253	Sequence 2253, App
147	43	87.8	9	3	US-09-891-823-103	Sequence 103, App	220	35.5	72.4	307	5	US-10-450-763-43033	Sequence 43033, A
148	43	87.8	9	3	US-09-909-460-111	Sequence 111, App	221	35.5	72.4	560	3	US-09-915-181A-5	Sequence 5, Appl1
149	43	87.8	9	3	US-09-872-836-115	Sequence 115, App	222	35.5	72.4	560	3	US-09-965-522-4	Sequence 4, Appl1
150	43	87.8	9	4	US-10-128-711-68	Sequence 68, Appl1	223	35.5	72.4	560	3	US-10-965-522-4	Sequence 4, Appl1
151	43	87.8	9	4	US-10-365-908-103	Sequence 103, App	224	35.5	72.4	560	4	US-10-314-790-5	Sequence 5, Appl1
152	43	87.8	9	4	US-10-472-661-5	Sequence 5, Appl1	225	35.5	72.4	560	5	US-10-734-731-2	Sequence 2, Appl1
153	43	87.8	9	4	US-10-472-661-6	Sequence 6, Appl1	226	35.5	72.4	560	5	US-10-734-731-4	Sequence 4, Appl1
154	43	87.8	9	4	US-10-777-053-326	Sequence 326, App	227	35.5	72.4	560	5	US-10-734-731-6	Sequence 6, Appl1
155	43	87.8	9	4	US-10-777-053-490	Sequence 490, App	228	35.5	72.4	560	5	US-10-734-731-8	Sequence 8, Appl1
156	43	87.8	9	4	US-10-837-217-326	Sequence 326, App	229	35.5	72.4	560	5	US-10-807-500-2	Sequence 2, Appl1
157	43	87.8	9	4	US-10-837-217-490	Sequence 490, App	230	35.5	72.4	560	5	US-10-807-500-4	Sequence 4, Appl1
158	43	87.8	9	5	US-10-603-062-2	Sequence 2, Appl1	231	35.5	72.4	560	5	US-10-807-500-6	Sequence 6, Appl1
159	43	87.8	9	5	US-10-603-062-27	Sequence 27, Appl1	232	35.5	72.4	560	5	US-10-807-500-8	Sequence 8, Appl1
160	43	87.8	9	5	US-10-871-138-103	Sequence 103, App	233	35.5	72.4	560	5	US-10-877-818-4	Sequence 4, Appl1
161	43	87.8	9	5	US-10-751-845-102	Sequence 102, App	234	35.5	72.4	560	5	US-10-756-149-5598	Sequence 5598, App
162	43	87.8	10	3	US-09-891-823-99	Sequence 99, Appl1	235	35.5	72.4	578	3	US-09-740-041-4	Sequence 4, Appl1
163	43	87.8	10	4	US-10-365-908-99	Sequence 99, Appl1	236	35.5	72.4	578	4	US-10-389-967-4	Sequence 4, Appl1
164	43	87.8	10	5	US-10-871-138-99	Sequence 99, Appl1	237	35.5	72.4	582	3	US-09-915-181A-4	Sequence 4, Appl1
165	43	87.8	19	5	US-10-776-521B-376	Sequence 376, App	238	35.5	72.4	582	4	US-10-205-331-7	Sequence 7, Appl1
166	43	87.8	20	5	US-10-776-521B-377	Sequence 377, App	239	35.5	72.4	582	5	US-10-734-731-10	Sequence 10, Appl1
167	43	87.8	98	5	US-10-367-057-12	Sequence 12, Appl1	240	35.5	72.4	582	5	US-10-734-731-12	Sequence 12, Appl1
168	43	87.8	517	5	US-10-475-203A-14	Sequence 14, Appl1	241	35.5	72.4	582	5	US-10-734-731-14	Sequence 14, Appl1
169	42	85.7	128	4	US-10-424-599-159372	Sequence 159372, A	242	35.5	72.4	582	5	US-10-807-500-10	Sequence 10, Appl1
170	39	79.6	78	4	US-10-724-972A-60305	Sequence 60305, App	243	35.5	72.4	582	5	US-10-807-500-12	Sequence 12, Appl1
171	39	79.6	329	5	US-10-450-763-43047	Sequence 43047, A	244	35.5	72.4	582	5	US-10-807-500-14	Sequence 14, Appl1
172	38	77.6	9	3	US-09-891-823-21	Sequence 21, Appl1	245	35	71.4	46	4	US-10-437-963-145101	Sequence 145101, A
173	38	77.6	9	4	US-10-365-908-21	Sequence 21, Appl1	246	35	71.4	56	4	US-10-425-115-358261	Sequence 358261, A

247	35	71.4	58	5	US-10-450-763-37005	Sequence 37005, A	320	34	69.4	261	4	US-10-425-114-54690	Sequence 54690, A
248	35	71.4	88	4	US-10-424-599-178446	Sequence 17846, A	321	34	69.4	261	4	US-10-425-114-54692	Sequence 54692, A
249	35	71.4	93	4	US-10-425-115-237139	Sequence 237139, A	322	34	69.4	261	4	US-10-425-114-54694	Sequence 54694, A
250	35	71.4	95	4	US-10-425-115-250602	Sequence 250602, A	323	34	69.4	261	4	US-10-425-114-54696	Sequence 54696, A
251	35	71.4	116	4	US-10-424-599-402136	Sequence 202136, A	324	34	69.4	261	4	US-10-425-114-54697	Sequence 54697, A
252	35	71.4	133	4	US-10-767-701-451199	Sequence 451199, A	325	34	69.4	261	4	US-10-425-114-54699	Sequence 54699, A
253	35	71.4	143	4	US-10-424-599-153300	Sequence 133300, A	326	34	69.4	261	4	US-10-425-114-71947	Sequence 71947, A
254	35	71.4	163	3	US-09-738-626-4816	Sequence 4816, Ap	327	34	69.4	261	4	US-10-425-114-71990	Sequence 71990, A
255	35	71.4	222	3	US-09-837-306-107	Sequence 307, App	328	34	69.4	261	5	US-10-450-763-36889	Sequence 36889, A
256	35	71.4	222	3	US-10-501-282-2708	Sequence 2708, Ap	329	34	69.4	262	4	US-10-153-668-57	Sequence 57, App1
257	35	71.4	227	5	US-10-424-599-164527	Sequence 164527, A	330	34	69.4	435	4	US-10-369-493-1428	Sequence 1428, Ap
258	35	71.4	227	5	US-10-732-923-15687	Sequence 15687, A	331	34	69.4	473	4	US-10-282-1224-53999	Sequence 53999, A
259	35	71.4	228	4	US-10-767-701-41338	Sequence 41338, A	332	34	69.4	473	4	US-10-282-1224-53999	Sequence 53999, A
260	35	71.4	233	4	US-10-045-674-485	Sequence 485, App	333	34	69.4	473	4	US-10-425-114-43311	Sequence 43311, A
261	35	71.4	247	4	US-10-424-599-188295	Sequence 188295, A	334	34	69.4	474	5	US-10-450-763-49995	Sequence 49995, A
262	35	71.4	249	5	US-10-732-923-15585	Sequence 15585, A	335	34	69.4	554	4	US-10-450-763-31563	Sequence 31563, A
263	35	71.4	249	5	US-10-732-923-15658	Sequence 15658, A	336	34	69.4	570	4	US-09-374-0468-30	Sequence 30, App1
264	35	71.4	250	4	US-10-424-599-164528	Sequence 164528, A	337	34	69.4	570	4	US-10-616-263-30	Sequence 30, App1
265	35	71.4	253	5	US-10-732-923-15686	Sequence 15686, A	338	34	69.4	572	4	US-10-408-765-1071	Sequence 1071, App
266	35	71.4	272	4	US-10-501-282-2710	Sequence 2710, Ap	339	34	69.4	602	4	US-10-264-049-2907	Sequence 2907, Ap
267	35	71.4	441	4	US-10-424-599-153301	Sequence 153301, A	340	34	69.4	602	4	US-10-425-115-222274	Sequence 222274, A
268	35	71.4	442	4	US-10-437-963-168008	Sequence 168008, A	341	34	69.4	602	4	US-10-282-1224-43041	Sequence 43041, A
269	35	71.4	480	5	US-10-450-763-55735	Sequence 55735, A	342	34	69.4	612	4	US-10-282-1224-43041	Sequence 43041, A
270	35	71.4	480	5	US-10-369-493-8588	Sequence 8588, Ap	343	34	69.4	756	6	US-11-097-143-2016	Sequence 12395, A
271	35	71.4	494	4	US-10-389-566-447	Sequence 274530, A	344	34	69.4	756	6	US-10-437-963-132395	Sequence 2016, Ap
272	35	71.4	515	4	US-10-389-566-447	Sequence 447, App	345	34	69.4	890	4	US-10-764-425-189	Sequence 189, App
273	35	71.4	539	4	US-10-425-114-53259	Sequence 53259, A	346	34	69.4	927	5	US-10-450-763-45516	Sequence 45516, A
274	35	71.4	539	4	US-10-425-115-229370	Sequence 229370, A	347	34	69.4	1033	5	US-10-450-763-53579	Sequence 53579, A
275	35	71.4	557	4	US-10-425-115-229375	Sequence 229375, A	348	34	69.4	1110	4	US-10-369-493-1495	Sequence 1495, A
276	35	71.4	592	4	US-10-425-115-191484	Sequence 191484, A	349	33.5	68.4	589	3	US-09-740-041-2	Sequence 300, App
277	35	71.4	593	4	US-10-437-963-118257	Sequence 118257, A	350	33.5	68.4	589	3	US-10-389-967-2	Sequence 2, App1
278	35	70.4	93	3	US-09-759-1308-155	Sequence 155, App	351	33.5	68.4	589	5	US-10-489-9731-28	Sequence 28, App1
279	34.5	70.4	93	3	US-10-741-790-155	Sequence 155, App	352	33.5	68.4	601	5	US-10-499-731-46	Sequence 46, App1
280	34.5	70.4	115	3	US-09-759-1308-153	Sequence 153, App	353	33.5	68.4	850	3	US-10-499-731-46	Sequence 3, App1
281	34.5	70.4	115	3	US-10-741-790-153	Sequence 153, App	354	33	67.3	59	4	US-10-424-599-192704	Sequence 192704, A
282	34	69.4	110	3	US-09-891-823-12	Sequence 12, App1	355	33	67.3	64	4	US-10-425-115-201387	Sequence 201387, A
283	34	69.4	10	4	US-10-365-908-12	Sequence 12, App1	356	33	67.3	72	4	US-10-424-599-175286	Sequence 175286, A
284	34	69.4	10	5	US-10-871-138-12	Sequence 12, App1	357	33	67.3	96	4	US-10-424-599-263781	Sequence 263781, A
285	34	69.4	51	5	US-10-450-763-54663	Sequence 54663, A	358	33	67.3	102	4	US-10-425-115-292304	Sequence 292304, A
286	34	69.4	51	5	US-10-425-115-197093	Sequence 197093, A	359	33	67.3	107	4	US-10-424-599-331224	Sequence 331224, A
287	34	69.4	59	4	US-10-424-599-224149	Sequence 224149, A	360	33	67.3	107	5	US-10-732-923-157577	Sequence 157577, A
288	34	69.4	80	4	US-10-424-599-194450	Sequence 194450, A	361	33	67.3	110	4	US-10-425-115-290361	Sequence 290361, A
289	34	69.4	82	4	US-10-424-599-229676	Sequence 229676, A	362	33	67.3	118	4	US-10-424-599-221521	Sequence 221521, A
290	34	69.4	91	4	US-10-424-599-182522	Sequence 182522, A	363	33	67.3	123	4	US-10-424-599-165883	Sequence 165883, A
291	34	69.4	102	4	US-10-094-749-2159	Sequence 2159, Ap	364	33	67.3	201	4	US-10-424-599-158283	Sequence 158283, A
292	34	69.4	102	4	US-10-424-599-279342	Sequence 279342, A	365	33	67.3	215	4	US-10-424-599-226147	Sequence 226147, A
293	34	69.4	106	4	US-10-425-115-359452	Sequence 359452, A	366	33	67.3	244	4	US-10-424-599-148633	Sequence 148633, A
294	34	69.4	109	4	US-10-437-963-187318	Sequence 187318, A	367	33	67.3	249	4	US-10-425-114-19743	Sequence 39743, A
295	34	69.4	113	4	US-10-369-493-19264	Sequence 19264, A	368	33	67.3	252	4	US-10-369-493-810	Sequence 810, App
296	34	69.4	114	4	US-10-424-599-147618	Sequence 147618, A	369	33	67.3	252	4	US-10-282-1224-56538	Sequence 56538, A
297	34	69.4	119	4	US-10-424-599-224060	Sequence 224060, A	370	33	67.3	252	4	US-10-424-599-191719	Sequence 191719, A
298	34	69.4	133	4	US-10-425-115-323777	Sequence 323777, A	371	33	67.3	327	4	US-10-437-963-143315	Sequence 143315, A
299	34	69.4	133	4	US-10-425-115-347934	Sequence 347934, A	372	33	67.3	352	5	US-10-635-398-72	Sequence 72, App1
300	34	69.4	157	4	US-10-425-115-347934	Sequence 347934, A	373	33	67.3	352	5	US-10-425-114-70055	Sequence 70055, A
301	34	69.4	186	4	US-10-767-701-38658	Sequence 38658, A	374	33	67.3	362	4	US-10-205-194-61	Sequence 61, App1
302	34	69.4	193	4	US-10-156-761-9705	Sequence 9705, Ap	375	33	67.3	374	4	US-10-359-493-10843	Sequence 10843, A
303	34	69.4	223	3	US-09-986-480-312	Sequence 312, App	376	33	67.3	377	4	US-10-157-031-263	Sequence 263, App
304	34	69.4	223	5	US-10-863-332-312	Sequence 332, App	377	33	67.3	384	4	US-10-021-660-77	Sequence 77, App1
305	34	69.4	225	4	US-10-424-599-230376	Sequence 230376, A	378	33	67.3	384	4	US-10-303-664-21	Sequence 21, App1
306	34	69.4	225	4	US-10-424-599-251416	Sequence 251416, A	379	33	67.3	384	4	US-10-211-482-16	Sequence 26, App1
307	34	69.4	226	4	US-10-425-115-299197	Sequence 299197, A	380	33	67.3	384	4	US-10-322-281-42	Sequence 12, App1
308	34	69.4	228	5	US-10-732-923-15707	Sequence 15707, A	381	33	67.3	384	5	US-10-631-467-145	Sequence 746, App
309	34	69.4	237	4	US-10-424-599-251412	Sequence 251412, A	382	33	67.3	386	4	US-10-173-999-119	Sequence 119, App
310	34	69.4	240	4	US-10-408-765A-1191	Sequence 1191, Ap	383	33	67.3	386	5	US-10-635-398-14	Sequence 76, App1
311	34	69.4	240	4	US-10-408-765A-1192	Sequence 1192, Ap	384	33	67.3	386	5	US-10-635-398-16	Sequence 1506, App
312	34	69.4	250	4	US-10-424-599-220375	Sequence 220375, A	385	33	67.3	386	5	US-10-631-467-1506	Sequence 1506, App
313	34	69.4	250	5	US-10-732-923-15706	Sequence 15706, A	386	33	67.3	394	4	US-10-332-281-17	Sequence 14, App1
314	34	69.4	251	4	US-10-425-114-71897	Sequence 71897, A	387	33	67.3	395	4	US-10-282-1224-63756	Sequence 63756, A
315	34	69.4	252	4	US-10-424-599-211594	Sequence 211594, A	388	33	67.3	407	4	US-10-282-1224-56893	Sequence 56893, A
316	34	69.4	252	4	US-10-424-599-230383	Sequence 230383, A	389	33	67.3	407	4	US-10-282-1224-57824	Sequence 57824, A
317	34	69.4	252	4	US-10-424-599-251413	Sequence 251413, A	390	33	67.3	412	3	US-09-950-772-6	Sequence 6, App1
318	34	69.4	253	4	US-10-425-114-54650	Sequence 54650, A	391	33	67.3	412	4	US-10-289-360-4	Sequence 4, App1
319	34	69.4	261	4	US-10-425-114-54670	Sequence 54670, A	392	33	67.3	412	4	US-10-334-990-7	Sequence 7, App1

393	33	67.3	412	4	US-10-045-063-2	Sequence 2, Appl1	466	32	65.3	83	4	US-10-424-599-203517	Sequence 203517,
394	33	67.3	412	5	US-10-863-245A-6	Sequence 6, Appl1	467	32	65.3	87	4	US-10-437-963-111664	Sequence 111664,
395	33	67.3	453	5	US-10-504-424-2	Sequence 2, Appl1	468	32	65.3	90	4	US-10-437-963-188540	Sequence 188540,
396	33	67.3	453	5	US-10-504-424-4	Sequence 4, Appl1	469	32	65.3	90	4	US-10-425-115-245880	Sequence 245880,
397	33	67.3	463	3	US-09-815-242-5562	Sequence 5562, Ap	470	32	65.3	92	4	US-10-424-599-160237	Sequence 160237,
398	33	67.3	463	3	US-09-815-242-12572	Sequence 12572, A	471	32	65.3	94	4	US-10-424-599-231652	Sequence 231652,
399	33	67.3	463	3	US-09-815-242-12754	Sequence 12754, A	472	32	65.3	98	4	US-10-437-963-107709	Sequence 107709,
400	33	67.3	463	4	US-10-282-122A-4091	Sequence 4091, A	473	32	65.3	100	4	US-10-424-599-246658	Sequence 246658,
401	33	67.3	463	4	US-10-282-122A-70764	Sequence 70764, A	474	32	65.3	101	4	US-10-425-115-367552	Sequence 367552,
402	33	67.3	463	4	US-10-282-122A-71764	Sequence 71764, A	475	32	65.3	102	4	US-10-425-115-209210	Sequence 209210,
403	33	67.3	463	5	US-10-857-625-805	Sequence 805, App	476	32	65.3	104	4	US-10-424-599-233856	Sequence 233856,
404	33	67.3	467	4	US-10-724-972A-4014	Sequence 4014, Ap	477	32	65.3	110	4	US-10-424-599-182999	Sequence 182999,
405	33	67.3	510	4	US-10-425-114-48923	Sequence 48923, A	478	32	65.3	111	3	US-09-764-891-479	Sequence 479, App
406	33	67.3	510	4	US-10-425-115-195566	Sequence 195566,	479	32	65.3	111	4	US-10-125-540-479	Sequence 479, App
407	33	67.3	531	4	US-10-154-419-81	Sequence 81, Appl	480	32	65.3	113	4	US-10-424-599-175689	Sequence 175689,
408	33	67.3	531	4	US-10-146-733-31	Sequence 31, Appl	481	32	65.3	113	4	US-10-424-599-196428	Sequence 196428,
409	33	67.3	537	3	US-09-486-734A-8	Sequence 8, Appl1	482	32	65.3	115	4	US-10-424-599-176708	Sequence 176708,
410	33	67.3	535	3	US-10-369-493-18544	Sequence 18544, A	483	32	65.3	115	4	US-10-425-115-246271	Sequence 246271,
411	33	67.3	535	3	US-09-764-875-1065	Sequence 1065, Ap	484	32	65.3	118	4	US-10-425-115-360969	Sequence 360969,
412	33	67.3	609	4	US-10-425-115-206579	Sequence 206579,	485	32	65.3	120	5	US-10-820-47A-105	Sequence 105, App
413	33	67.3	615	5	US-10-732-923-13628	Sequence 13628, A	486	32	65.3	124	4	US-10-424-599-188342	Sequence 188342,
414	33	67.3	616	5	US-10-732-923-13629	Sequence 13629, A	487	32	65.3	125	4	US-10-106-698-6924	Sequence 6924, Ap
415	33	67.3	751	4	US-10-296-606-7	Sequence 7, Appl1	488	32	65.3	128	4	US-10-425-115-277122	Sequence 277122,
416	33	67.3	802	3	US-09-838-561-2	Sequence 2, Appl1	489	32	65.3	136	5	US-10-732-923-15677	Sequence 15677, A
417	33	67.3	802	3	US-09-816-760-2	Sequence 2, Appl1	490	32	65.3	140	5	US-10-732-923-15681	Sequence 15681, A
418	33	67.3	802	4	US-10-172-585-2	Sequence 2, Appl1	491	32	65.3	142	5	US-10-732-923-15681	Sequence 15681, A
419	33	67.3	802	4	US-10-664-506-2	Sequence 2, Appl1	492	32	65.3	144	4	US-10-425-115-272159	Sequence 272159,
420	33	67.3	803	3	US-09-764-875-764	Sequence 764, App	493	32	65.3	144	5	US-10-821-273-84	Sequence 84, Appl
421	33	67.3	864	5	US-10-450-763-52140	Sequence 52140, A	494	32	65.3	145	4	US-10-767-701-38603	Sequence 38603, A
422	33	67.3	1014	4	US-10-411-253-3	Sequence 3, Appl1	495	32	65.3	146	5	US-10-501-283-3428	Sequence 3428, Ap
423	33	67.3	1057	4	US-10-282-122A-66435	Sequence 66435, A	496	32	65.3	154	4	US-10-425-114-46848	Sequence 46848, A
424	33	67.3	2586	3	US-09-729-485A-11	Sequence 11, Appl	497	32	65.3	161	4	US-10-424-599-171200	Sequence 171200,
425	33	67.3	2586	3	US-09-729-485A-14	Sequence 14, Appl	498	32	65.3	166	4	US-10-425-115-352042	Sequence 352042,
426	33	67.3	2586	3	US-09-802-318-11	Sequence 11, Appl	499	32	65.3	167	4	US-10-425-115-368836	Sequence 368836,
427	33	67.3	2586	3	US-09-802-318-14	Sequence 14, Appl	500	32	65.3	169	4	US-10-424-599-185775	Sequence 185775,
428	33	67.3	2586	3	US-09-905-129-11	Sequence 11, Appl	501	32	65.3	173	4	US-10-425-115-316269	Sequence 316269,
429	33	67.3	2586	3	US-09-905-129-11	Sequence 11, Appl	502	32	65.3	175	6	US-11-097-143-27150	Sequence 27150, A
430	33	67.3	2586	3	US-09-991-630-11	Sequence 11, Appl	503	32	65.3	179	6	US-11-097-143-39495	Sequence 39495, A
431	33	67.3	2586	3	US-09-991-630-14	Sequence 14, Appl	504	32	65.3	181	4	US-10-425-115-338024	Sequence 338024,
432	33	67.3	2586	4	US-10-454-351-11	Sequence 11, Appl	505	32	65.3	182	4	US-10-437-963-140516	Sequence 140516,
433	33	67.3	2586	4	US-10-454-351-14	Sequence 14, Appl	506	32	65.3	183	4	US-10-437-963-140515	Sequence 140515,
434	33	67.3	2587	3	US-09-729-485A-16	Sequence 16, Appl	507	32	65.3	185	5	US-10-658-232-2	Sequence 2, Appl1
435	33	67.3	2587	3	US-09-802-318-16	Sequence 16, Appl	508	32	65.3	187	4	US-10-437-963-110425	Sequence 110425,
436	33	67.3	2587	3	US-09-905-129-16	Sequence 16, Appl	509	32	65.3	188	4	US-10-767-701-43603	Sequence 43603, A
437	33	67.3	2587	3	US-09-905-129-16	Sequence 16, Appl	510	32	65.3	196	4	US-10-147-874-8	Sequence 8, Appl1
438	33	67.3	2587	4	US-10-454-351-16	Sequence 16, Appl	511	32	65.3	202	4	US-10-017-161-1308	Sequence 1308, Ap
439	33	67.3	2589	4	US-09-991-630-24	Sequence 24, Appl	512	32	65.3	202	4	US-10-292-798-1074	Sequence 1074, Ap
440	33	67.3	2589	4	US-10-454-351-24	Sequence 24, Appl	513	32	65.3	203	4	US-10-425-115-356578	Sequence 356578,
441	33	67.3	2591	4	US-10-032-189-56	Sequence 56, Appl	514	32	65.3	205	4	US-10-425-115-351063	Sequence 351063,
442	33	67.3	2591	6	US-11-097-143-37233	Sequence 37233, A	515	32	65.3	206	4	US-10-767-701-4076	Sequence 4076, A
443	33	67.3	2617	4	US-10-032-189-46	Sequence 46, Appl	516	32	65.3	206	5	US-10-732-923-15664	Sequence 15664, A
444	33	67.3	2623	3	US-10-454-351-32	Sequence 32, Appl	517	32	65.3	216	4	US-10-369-493-17623	Sequence 17623, A
445	32	65.3	9	3	US-09-891-823-74	Sequence 74, Appl	518	32	65.3	218	4	US-10-425-115-220195	Sequence 220195,
446	32	65.3	9	4	US-09-891-823-81	Sequence 81, Appl	519	32	65.3	221	4	US-10-767-701-59810	Sequence 59810, A
447	32	65.3	9	4	US-10-365-908-74	Sequence 74, Appl	520	32	65.3	246	4	US-10-369-493-12318	Sequence 12318, A
448	32	65.3	9	4	US-10-365-908-81	Sequence 81, Appl	521	32	65.3	247	5	US-10-425-115-246408	Sequence 246408,
449	32	65.3	9	5	US-10-871-138-74	Sequence 74, Appl	522	32	65.3	247	5	US-10-732-923-15694	Sequence 15694, A
450	32	65.3	9	5	US-10-871-138-81	Sequence 81, Appl	523	32	65.3	249	5	US-10-732-923-15694	Sequence 15694, A
451	32	65.3	30	3	US-09-764-860-345	Sequence 345, App	524	32	65.3	250	4	US-10-424-599-285211	Sequence 285211,
452	32	65.3	30	4	US-10-074-095-345	Sequence 345, App	525	32	65.3	250	5	US-10-732-923-15689	Sequence 15689, A
453	32	65.3	30	4	US-10-212-872-345	Sequence 345, App	526	32	65.3	250	5	US-10-732-923-15693	Sequence 15693, A
454	32	65.3	50	4	US-10-029-386-31645	Sequence 31645, A	527	32	65.3	250	5	US-10-732-923-15704	Sequence 15704, A
455	32	65.3	61	4	US-10-424-599-270556	Sequence 270556,	528	32	65.3	252	4	US-10-437-963-200712	Sequence 200712,
456	32	65.3	63	4	US-10-424-599-160181	Sequence 160181,	529	32	65.3	252	5	US-10-732-923-15696	Sequence 15696, A
457	32	65.3	64	3	US-09-764-891-4765	Sequence 4765, Ap	530	32	65.3	253	4	US-10-282-122A-59479	Sequence 59479, A
458	32	65.3	64	4	US-10-091-572-320	Sequence 320, App	531	32	65.3	254	4	US-10-425-115-363355	Sequence 363355,
459	32	65.3	67	4	US-10-424-599-178055	Sequence 178055,	532	32	65.3	257	5	US-10-732-923-20884	Sequence 20884, A
460	32	65.3	67	4	US-10-424-599-233104	Sequence 233104,	533	32	65.3	259	4	US-10-425-115-228221	Sequence 228221,
461	32	65.3	68	4	US-10-424-599-189340	Sequence 189340,	534	32	65.3	260	4	US-10-425-115-46566	Sequence 46566, A
462	32	65.3	68	4	US-10-425-115-284634	Sequence 284634,	535	32	65.3	265	4	US-10-425-115-41437	Sequence 41437, A
463	32	65.3	69	4	US-09-864-408A-3810	Sequence 3810, Ap	536	32	65.3	265	4	US-10-425-115-62005	Sequence 62005, A
464	32	65.3	74	4	US-10-424-599-153949	Sequence 153949,	537	32	65.3	266	4	US-10-425-115-59284	Sequence 59284, A
465	32	65.3	75	5	US-10-658-232-9	Sequence 9, Appl1	538	32	65.3	267	4	US-10-425-114-57327	Sequence 57327, A

539	32	65.3	272	4	US-10-437-963-195120	Sequence 195120, A
540	32	65.3	291	5	US-10-732-923-1385	Sequence 1385, Ap
541	32	65.3	292	4	US-10-767-701-77595	Sequence 37595, A
542	32	65.3	294	4	US-10-156-761-7738	Sequence 7738, Ap
543	32	65.3	304	5	US-10-450-763-49752	Sequence 49752, A
544	32	65.3	314	4	US-10-335-977-625	Sequence 7625, Ap
545	32	65.3	314	5	US-10-450-763-40857	Sequence 40857, A
546	32	65.3	315	3	US-09-925-302-600	Sequence 600, App
547	32	65.3	315	3	US-09-925-302-600	Sequence 600, App
548	32	65.3	318	4	US-10-437-963-111655	Sequence 111655, A
549	32	65.3	319	4	US-10-041-615-522	Sequence 22, Appl
550	32	65.3	326	4	US-10-017-161-502	Sequence 502, App
551	32	65.3	326	4	US-10-387-629-234	Sequence 234, App
552	32	65.3	326	4	US-10-232-798-442	Sequence 442, App
553	32	65.3	332	5	US-09-515-806-18	Sequence 18, Appl
554	32	65.3	332	5	US-10-892-276-19	Sequence 19, Appl
555	32	65.3	340	3	US-09-882-227-490	Sequence 490, App
556	32	65.3	340	4	US-10-425-114-45772	Sequence 45772, A
557	32	65.3	340	4	US-10-335-977-7626	Sequence 7626, Ap
558	32	65.3	345	5	US-10-739-930-10286	Sequence 10286, A
559	32	65.3	346	4	US-10-767-701-46964	Sequence 46964, A
560	32	65.3	361	4	US-10-178-977A-2	Sequence 2, Appl1
561	32	65.3	361	4	US-10-178-977A-4	Sequence 4, Appl1
562	32	65.3	361	4	US-10-178-977A-6	Sequence 6, Appl1
563	32	65.3	386	4	US-10-156-761-14356	Sequence 14356, A
564	32	65.3	389	5	US-10-450-763-47341	Sequence 47341, A
565	32	65.3	391	4	US-10-296-115-795	Sequence 795, App
566	32	65.3	394	4	US-10-425-115-283062	Sequence 283062, A
567	32	65.3	398	4	US-10-282-122A-61880	Sequence 61880, A
568	32	65.3	402	4	US-10-425-114-67621	Sequence 67621, A
569	32	65.3	405	4	US-10-369-493-22959	Sequence 22959, A
570	32	65.3	405	5	US-10-658-232-4	Sequence 4, Appl1
571	32	65.3	407	5	US-10-450-763-45905	Sequence 45905, A
572	32	65.3	421	4	US-10-156-761-8243	Sequence 8243, Ap
573	32	65.3	440	4	US-10-369-493-22156	Sequence 22156, A
574	32	65.3	440	4	US-10-282-122A-72107	Sequence 72107, A
575	32	65.3	448	4	US-10-029-756-5	Sequence 5, Appl1
576	32	65.3	448	4	US-10-340-779A-13	Sequence 13, Appl1
577	32	65.3	448	4	US-10-702-777-5	Sequence 5, Appl1
578	32	65.3	452	4	US-10-029-756-27	Sequence 27, Appl1
579	32	65.3	452	4	US-10-702-777-27	Sequence 27, Appl1
580	32	65.3	458	4	US-10-370-100-1	Sequence 1, Appl1
581	32	65.3	458	6	US-11-102-757-1	Sequence 1, Appl1
582	32	65.3	465	5	US-10-658-232-11	Sequence 11, Appl1
583	32	65.3	467	4	US-10-425-115-368834	Sequence 368834, A
584	32	65.3	482	4	US-10-437-963-140514	Sequence 140514, A
585	32	65.3	484	6	US-11-097-143-22116	Sequence 22116, A
586	32	65.3	485	4	US-10-425-114-65537	Sequence 65537, A
587	32	65.3	507	4	US-10-406-686A-7	Sequence 7, Appl1
588	32	65.3	515	4	US-10-437-963-156191	Sequence 156191, A
589	32	65.3	522	4	US-10-425-114-62371	Sequence 62371, A
590	32	65.3	533	4	US-10-282-122A-77235	Sequence 77235, A
591	32	65.3	537	4	US-10-424-599-220650	Sequence 220650, A
592	32	65.3	540	4	US-10-424-599-230656	Sequence 230656, A
593	32	65.3	541	4	US-10-424-599-154566	Sequence 154566, A
594	32	65.3	552	4	US-10-425-114-46247	Sequence 46247, A
595	32	65.3	552	4	US-10-425-114-46829	Sequence 46829, A
596	32	65.3	557	6	US-11-097-143-22278	Sequence 22278, A
597	32	65.3	571	4	US-10-425-115-246415	Sequence 246415, A
598	32	65.3	573	4	US-10-282-122A-77979	Sequence 77979, A
599	32	65.3	574	4	US-10-437-963-140512	Sequence 140512, A
600	32	65.3	574	4	US-10-425-114-53284	Sequence 53284, A
601	32	65.3	579	4	US-10-425-114-38818	Sequence 38818, A
602	32	65.3	592	5	US-10-739-930-5645	Sequence 5645, Ap
603	32	65.3	593	4	US-10-425-115-246416	Sequence 246416, A
604	32	65.3	593	5	US-10-658-232-14	Sequence 14, Appl
605	32	65.3	595	5	US-10-424-599-147535	Sequence 147535, A
606	32	65.3	595	5	US-10-658-232-6	Sequence 6, Appl1
607	32	65.3	595	5	US-10-658-232-17	Sequence 17, Appl
608	32	65.3	598	4	US-10-424-599-225513	Sequence 225513, A
609	32	65.3	601	4	US-10-425-114-342358	Sequence 342358, A
610	32	65.3	610	4	US-10-425-114-71089	Sequence 71089, A
611	32	65.3	613	4	US-10-437-963-165691	Sequence 165691, A
612	32	65.3	623	4	US-10-425-114-70529	Sequence 70529, A
613	32	65.3	629	4	US-10-437-963-204503	Sequence 204503, A
614	32	65.3	639	4	US-10-437-963-164725	Sequence 164725, A
615	32	65.3	639	4	US-09-728-910-4	Sequence 4, Appl1
616	32	65.3	639	4	US-09-331-795-4	Sequence 4, Appl1
617	32	65.3	639	4	US-09-802-640-34	Sequence 34, Appl1
618	32	65.3	639	4	US-10-335-172-4	Sequence 4, Appl1
619	32	65.3	639	4	US-10-316-763A-4	Sequence 4, Appl1
620	32	65.3	639	4	US-10-370-114-2	Sequence 2, Appl1
621	32	65.3	639	4	US-10-433-902A-34	Sequence 34, Appl1
622	32	65.3	639	4	US-10-433-392A-2	Sequence 2, Appl1
623	32	65.3	639	4	US-10-741-601-467	Sequence 467, App
624	32	65.3	639	4	US-10-741-601-470	Sequence 470, App
625	32	65.3	639	4	US-10-741-601-471	Sequence 471, App
626	32	65.3	639	4	US-10-741-601-472	Sequence 472, App
627	32	65.3	639	4	US-10-741-600-1366	Sequence 1366, Ap
628	32	65.3	639	4	US-10-741-600-1368	Sequence 1368, Ap
629	32	65.3	639	4	US-10-741-600-1369	Sequence 1369, Ap
630	32	65.3	639	4	US-10-741-600-1370	Sequence 1370, App
631	32	65.3	639	4	US-11-067-779-2	Sequence 2, Appl1
632	32	65.3	639	4	US-09-728-910-2	Sequence 2, Appl1
633	32	65.3	639	4	US-09-931-795-2	Sequence 2, Appl1
634	32	65.3	639	4	US-10-235-172-2	Sequence 2, Appl1
635	32	65.3	639	4	US-10-316-763A-2	Sequence 2, Appl1
636	32	65.3	639	4	US-11-067-779-2	Sequence 2, Appl1
637	32	65.3	639	4	US-10-450-763-59096	Sequence 59096, A
638	32	65.3	639	4	US-10-369-493-2501	Sequence 2501, Ap
639	32	65.3	639	4	US-10-741-601-468	Sequence 468, App
640	32	65.3	639	4	US-10-741-601-469	Sequence 469, App
641	32	65.3	639	4	US-10-741-600-1365	Sequence 1365, Ap
642	32	65.3	639	4	US-10-741-600-1367	Sequence 1367, Ap
643	32	65.3	639	4	US-10-741-600-1367	Sequence 1367, Ap
644	32	65.3	639	4	US-10-658-232-15	Sequence 15, Appl
645	32	65.3	639	4	US-10-756-149-59424	Sequence 524, Ap
646	32	65.3	639	4	US-10-282-122A-70931	Sequence 70931, A
647	32	65.3	639	4	US-10-282-122A-71444	Sequence 71444, A
648	32	65.3	639	4	US-10-724-972A-4301	Sequence 4301, Ap
649	32	65.3	639	4	US-10-334-143-26	Sequence 26, Appl
650	32	65.3	639	4	US-10-156-761-13135	Sequence 13135, A
651	32	65.3	639	4	US-10-437-963-197693	Sequence 197693, A
652	32	65.3	639	4	US-10-739-930-5863	Sequence 5863, Ap
653	32	65.3	639	4	US-10-097-143-22011	Sequence 22011, A
654	32	65.3	639	4	US-09-818-247-3	Sequence 3, Appl1
655	32	65.3	639	4	US-09-982-107-10	Sequence 10, Appl1
656	32	65.3	639	4	US-09-949-039-69	Sequence 69, Appl1
657	32	65.3	639	4	US-10-470-967-50	Sequence 30, Appl1
658	32	65.3	639	4	US-10-781-989-10	Sequence 10, Appl1
659	32	65.3	639	4	US-11-038-956-3	Sequence 3, Appl1
660	32	65.3	639	4	US-10-282-122A-71816	Sequence 71816, A
661	32	65.3	639	4	US-10-425-115-238086	Sequence 238086, A
662	32	65.3	639	4	US-10-425-115-314133	Sequence 314133, A
663	32	65.3	639	4	US-11-097-143-38646	Sequence 38646, A
664	32	65.3	639	4	US-10-437-963-104587	Sequence 104587, A
665	32	65.3	639	4	US-10-259-165-250	Sequence 250, App
666	32	65.3	639	4	US-10-437-963-120348	Sequence 120348, A
667	32	65.3	639	4	US-10-425-115-214829	Sequence 214829, A
668	32	65.3	639	4	US-11-097-143-1680	Sequence 1680, Ap
669	32	65.3	639	4	US-10-437-963-16227	Sequence 16227, A
670	32	65.3	639	4	US-10-153-273-12	Sequence 12, Appl
671	32	65.3	639	4	US-10-282-122A-63763	Sequence 63763, A
672	32	65.3	639	4	US-10-667-723-18	Sequence 18, Appl
673	32	65.3	639	4	US-10-447-161-145	Sequence 145, App
674	32	65.3	639	4	US-10-316-253-73	Sequence 73, Appl
675	32	65.3	639	4	US-10-012-922A-194	Sequence 194, App
676	32	65.3	639	4	US-10-437-963-155436	Sequence 155436, A
677	32	65.3	639	4	US-10-424-599-188745	Sequence 188745, A
678	32	65.3	639	4	US-10-425-115-187330	Sequence 187330, A
679	32	65.3	639	4	US-10-424-599-779329	Sequence 279329, A
680	32	65.3	639	4	US-10-424-599-151634	Sequence 151634, A
681	32	65.3	639	4	US-10-424-599-112974	Sequence 112974, A
682	32	65.3	639	4	US-10-424-599-242761	Sequence 242761, A
683	32	65.3	639	4	US-10-425-115-303527	Sequence 303527, A
684	32	65.3	639	4	US-10-425-115-303527	Sequence 303527, A

685	31	63.3	72	3	US-09-864-408A-6630	Sequence 6630, Ap	758	31	63.3	319	5	US-10-726-699-92	Sequence 92, Appl
686	31	63.3	75	4	US-10-767-701-58881	Sequence 58881, A	759	31	63.3	320	4	US-10-104-047-2641	Sequence 2641, Ap
687	31	63.3	78	4	US-10-424-599-164516	Sequence 164516,	760	31	63.3	321	6	US-11-052-140-2	Sequence 2, Appl1
688	31	63.3	80	3	US-09-764-887-211	Sequence 211, App	761	31	63.3	324	5	US-10-972-024-275	Sequence 275, App
689	31	63.3	80	4	US-10-073-961-211	Sequence 211, App	762	31	63.3	331	4	US-10-240-998-2	Sequence 2, Appl1
690	31	63.3	81	4	US-10-424-599-236261	Sequence 236261,	763	31	63.3	340	4	US-10-425-115-263572	Sequence 263572,
691	31	63.3	82	4	US-10-425-115-230460	Sequence 230460,	764	31	63.3	342	3	US-09-886-055-207	Sequence 207, App
692	31	63.3	82	4	US-10-425-115-236043	Sequence 236043,	765	31	63.3	342	3	US-09-804-291-207	Sequence 207, App
693	31	63.3	86	4	US-10-424-599-157262	Sequence 157262,	766	31	63.3	342	5	US-10-425-114-51582	Sequence 51582, A
694	31	63.3	93	4	US-10-424-599-163644	Sequence 163644,	767	31	63.3	342	5	US-10-819-316-207	Sequence 207, App
695	31	63.3	93	5	US-10-367-057-24	Sequence 24, Appl	768	31	63.3	354	4	US-10-424-599-182151	Sequence 182151,
696	31	63.3	94	4	US-10-424-599-148243	Sequence 148243,	769	31	63.3	359	4	US-10-424-599-279885	Sequence 279885,
697	31	63.3	95	4	US-10-425-114-37841	Sequence 37841, A	770	31	63.3	360	3	US-09-852-156-10	Sequence 10, Appl
698	31	63.3	96	4	US-10-424-599-359777	Sequence 259777,	771	31	63.3	360	3	US-09-852-156-12	Sequence 12, Appl
699	31	63.3	96	5	US-10-499-065A-426	Sequence 426, App	772	31	63.3	363	4	US-10-424-599-275896	Sequence 275896,
700	31	63.3	102	4	US-10-424-599-250588	Sequence 250588,	773	31	63.3	363	4	US-10-425-114-58395	Sequence 58395, A
701	31	63.3	102	5	US-10-450-763-55650	Sequence 55650, A	774	31	63.3	363	5	US-10-972-024-567	Sequence 567, App
702	31	63.3	104	4	US-10-437-963-169393	Sequence 169393,	775	31	63.3	373	4	US-10-425-114-72366	Sequence 72366, A
703	31	63.3	107	4	US-10-424-599-156481	Sequence 156481,	776	31	63.3	374	4	US-10-369-493-17286	Sequence 17286, A
704	31	63.3	108	4	US-10-425-115-226088	Sequence 226088,	777	31	63.3	376	3	US-09-738-628-6115	Sequence 6115, Ap
705	31	63.3	108	4	US-10-425-115-242941	Sequence 242941,	778	31	63.3	376	5	US-10-721-922A-434	Sequence 434, App
706	31	63.3	111	4	US-10-767-701-31712	Sequence 31712, A	779	31	63.3	382	4	US-10-437-963-143286	Sequence 143286,
707	31	63.3	113	4	US-10-425-115-331254	Sequence 331254,	780	31	63.3	387	4	US-10-108-260A-2483	Sequence 2483, Ap
708	31	63.3	114	4	US-10-424-599-175398	Sequence 175398,	781	31	63.3	394	4	US-10-425-114-52180	Sequence 52180, A
709	31	63.3	119	4	US-10-767-701-43362	Sequence 43362, A	782	31	63.3	399	4	US-10-425-114-71565	Sequence 71565, A
710	31	63.3	120	4	US-10-424-599-156095	Sequence 156095,	783	31	63.3	400	4	US-10-097-065-146	Sequence 146, App
711	31	63.3	120	4	US-10-425-115-308123	Sequence 308123,	784	31	63.3	400	4	US-10-372-876-146	Sequence 146, App
712	31	63.3	125	4	US-10-424-599-282880	Sequence 282880,	785	31	63.3	401	3	US-09-871-874-11	Sequence 11, Appl
713	31	63.3	125	4	US-10-425-115-292225	Sequence 292225,	786	31	63.3	402	4	US-10-425-114-55353	Sequence 55353, A
714	31	63.3	132	4	US-10-437-963-135822	Sequence 135822,	787	31	63.3	404	4	US-10-425-115-329257	Sequence 329257,
715	31	63.3	135	4	US-10-425-114-38398	Sequence 38398, A	788	31	63.3	410	5	US-10-732-923-2612	Sequence 2612, Ap
716	31	63.3	138	4	US-10-425-114-38398	Sequence 38398, A	789	31	63.3	414	4	US-10-767-701-44954	Sequence 44954, A
717	31	63.3	140	4	US-10-425-115-221418	Sequence 221418,	790	31	63.3	415	4	US-10-108-605-119	Sequence 119, App
718	31	63.3	145	4	US-10-767-701-59125	Sequence 59125, A	791	31	63.3	418	5	US-10-450-763-32134	Sequence 32134, A
719	31	63.3	146	4	US-10-425-115-242271	Sequence 242271,	792	31	63.3	419	4	US-10-437-963-141970	Sequence 141970,
720	31	63.3	148	4	US-10-425-115-303400	Sequence 303400,	793	31	63.3	440	4	US-10-282-122A-48298	Sequence 48298, A
721	31	63.3	153	4	US-10-767-701-43034	Sequence 43034, A	794	31	63.3	441	3	US-09-871-874-21	Sequence 21, Appl
722	31	63.3	159	4	US-10-424-599-173912	Sequence 173912,	795	31	63.3	441	3	US-09-895-686-1	Sequence 1, Appl1
723	31	63.3	168	4	US-10-264-237-1560	Sequence 1560, Ap	796	31	63.3	445	4	US-10-425-114-68124	Sequence 68124, A
724	31	63.3	168	4	US-10-425-114-71812	Sequence 71812, A	797	31	63.3	445	4	US-10-437-963-1635820	Sequence 135820,
725	31	63.3	179	4	US-10-425-115-263568	Sequence 263568,	798	31	63.3	446	3	US-09-871-874-10	Sequence 10, Appl1
726	31	63.3	179	4	US-10-425-115-352054	Sequence 352054,	799	31	63.3	446	3	US-10-369-499-18516	Sequence 18516, A
727	31	63.3	185	4	US-10-425-114-46187	Sequence 46187, A	800	31	63.3	446	3	US-10-425-115-346124	Sequence 346124,
728	31	63.3	187	4	US-10-267-502-375	Sequence 375, App	801	31	63.3	451	3	US-09-871-874-9	Sequence 9, Appl1
729	31	63.3	187	6	US-11-097-143-16992	Sequence 16992, A	802	31	63.3	451	3	US-09-871-874-13	Sequence 13, Appl1
730	31	63.3	189	4	US-10-425-115-263566	Sequence 263566,	803	31	63.3	451	4	US-10-424-599-2256818	Sequence 2256818,
731	31	63.3	192	3	US-09-764-853-566	Sequence 566, App	804	31	63.3	451	4	US-10-425-115-346115	Sequence 346115,
732	31	63.3	192	4	US-10-425-115-258321	Sequence 258321,	805	31	63.3	453	4	US-10-225-567A-621	Sequence 621, App
733	31	63.3	193	4	US-10-437-963-124322	Sequence 124322,	806	31	63.3	454	4	US-10-425-115-29876	Sequence 292876,
734	31	63.3	207	4	US-10-425-115-220197	Sequence 220197,	807	31	63.3	461	4	US-10-425-115-358541	Sequence 358541,
735	31	63.3	220	4	US-10-369-93-11728	Sequence 11728, A	808	31	63.3	462	4	US-10-425-114-46596	Sequence 46596, A
736	31	63.3	220	4	US-10-369-493-14641	Sequence 14641, A	809	31	63.3	470	4	US-10-425-114-46596	Sequence 70852, A
737	31	63.3	223	4	US-10-369-93-15099	Sequence 15099, A	810	31	63.3	473	3	US-09-871-874-19	Sequence 19, Appl1
738	31	63.3	223	4	US-10-424-599-245807	Sequence 245807,	811	31	63.3	473	4	US-10-425-114-55651	Sequence 55651, A
739	31	63.3	223	4	US-10-425-115-316324	Sequence 316324,	812	31	63.3	481	4	US-10-425-114-45346	Sequence 45346, A
740	31	63.3	223	5	US-10-721-922A-438	Sequence 438, App	813	31	63.3	482	4	US-10-425-115-251008	Sequence 251008,
741	31	63.3	228	5	US-10-450-763-51219	Sequence 51219, A	814	31	63.3	482	4	US-10-425-114-45346	Sequence 122642,
742	31	63.3	229	4	US-10-424-599-231150	Sequence 231350,	815	31	63.3	484	4	US-10-437-963-122642	Sequence 47063, A
743	31	63.3	229	4	US-10-425-114-45542	Sequence 45542, A	816	31	63.3	486	3	US-10-767-701-47063	Sequence 14, Appl1
744	31	63.3	231	4	US-10-425-115-358545	Sequence 358545,	817	31	63.3	486	4	US-09-871-874-14	Sequence 223, Appl
745	31	63.3	231	4	US-10-425-114-40488	Sequence 40488, A	818	31	63.3	486	4	US-10-400-991-22	Sequence 273, App
746	31	63.3	231	4	US-10-425-115-201088	Sequence 201088,	819	31	63.3	486	5	US-10-291-265-273	Sequence 953, Ap
747	31	63.3	234	3	US-09-871-874-20	Sequence 20, Appl	820	31	63.3	488	4	US-10-739-930-9552	Sequence 205092,
748	31	63.3	243	5	US-10-739-930-7128	Sequence 7128, Ap	821	31	63.3	489	6	US-11-021-619-34	Sequence 34, Appl
749	31	63.3	246	4	US-10-424-599-280960	Sequence 280960,	822	31	63.3	491	4	US-10-108-260A-4290	Sequence 4290, Ap
750	31	63.3	252	4	US-10-156-761-8111	Sequence 8111, Ap	823	31	63.3	492	4	US-10-425-114-65933	Sequence 65933, A
751	31	63.3	255	5	US-10-732-923-938	Sequence 938, App	824	31	63.3	496	3	US-09-871-874-12	Sequence 12, Appl
752	31	63.3	259	5	US-10-774-355A-1716	Sequence 1716, Ap	825	31	63.3	496	4	US-10-425-114-51318	Sequence 51318, A
753	31	63.3	309	5	US-10-450-763-47449	Sequence 47449, A	826	31	63.3	496	4	US-10-425-114-51318	Sequence 57940, A
754	31	63.3	317	4	US-10-017-161-48	Sequence 48, Appl	827	31	63.3	496	4	US-10-425-114-51318	Sequence 68459, A
755	31	63.3	317	4	US-10-387-629-146	Sequence 146, App	828	31	63.3	497	4	US-10-425-114-68459	Sequence 68459, A
756	31	63.3	317	4	US-10-292-798-40	Sequence 40, Appl	829	31	63.3	498	4	US-10-389-647-585	Sequence 585, App
757	31	63.3	317	5	US-10-343-650A-500	Sequence 500, App	830	31	63.3	498	4	US-10-389-647-585	Sequence 585, App
					US-10-726-699-70	Sequence 70, Appl							

831	31	63.3	500	4	US-10-437-963-115126	Sequence 115126,	904	30.5	62.2	185	3	US-09-933-767-623	Sequence 623, App
832	31	63.3	509	5	US-10-732-923-1043	Sequence 1043, Ap	905	30.5	62.2	185	4	US-10-004-860-623	Sequence 623, App
833	31	63.3	511	4	US-10-437-963-143624	Sequence 143624,	906	30.5	62.2	185	4	US-10-023-982-623	Sequence 623, App
834	31	63.3	513	4	US-10-425-115-251005	Sequence 251005,	907	30	61.2	195	9	US-10-363-208-206	Sequence 206, App
835	31	63.3	514	4	US-10-437-963-127740	Sequence 127740,	908	30	61.2	11	4	US-10-044-844-63	Sequence 63, App
836	31	63.3	519	6	US-11-097-143-14874	Sequence 14874, A	909	30	61.2	11	4	US-10-044-844-63	Sequence 63, App
837	31	63.3	521	4	US-10-094-749-2829	Sequence 2829, Ap	910	30	61.2	11	5	US-10-846-079-63	Sequence 63, App
838	31	63.3	521	4	US-10-473-574-13	Sequence 13, Appl	911	30	61.2	12	4	US-10-044-844-62	Sequence 62, Appl
839	31	63.3	525	4	US-10-425-115-205094	Sequence 205094,	912	30	61.2	12	5	US-10-846-079-62	Sequence 62, Appl
840	31	63.3	527	4	US-10-032-585-7798	Sequence 7798, Ap	913	30	61.2	13	4	US-10-044-844-61	Sequence 61, Appl
841	31	63.3	527	4	US-10-451-467A-482	Sequence 482, App	914	30	61.2	13	5	US-10-838-289-228	Sequence 228, App
842	31	63.3	533	6	US-11-097-143-7398	Sequence 7398, Ap	915	30	61.2	13	5	US-10-838-289-238	Sequence 238, App
843	31	63.3	533	6	US-11-097-143-27849	Sequence 27849, A	916	30	61.2	13	5	US-10-607-595-174	Sequence 174, App
844	31	63.3	533	6	US-11-097-143-27852	Sequence 27852, A	917	30	61.2	13	5	US-10-607-595-183	Sequence 183, App
845	31	63.3	541	4	US-10-425-115-221847	Sequence 221847, A	918	30	61.2	13	5	US-10-846-079-61	Sequence 61, Appl
846	31	63.3	543	4	US-10-425-114-38193	Sequence 38193, A	919	30	61.2	14	4	US-10-044-844-57	Sequence 57, Appl
847	31	63.3	545	4	US-10-753-526-23	Sequence 23, Appl	920	30	61.2	14	4	US-10-044-844-60	Sequence 60, Appl
848	31	63.3	545	4	US-11-052-106-8	Sequence 8, Appl	921	30	61.2	14	5	US-10-846-079-57	Sequence 57, Appl
849	31	63.3	546	6	US-10-451-467A-478	Sequence 478, App	922	30	61.2	14	5	US-10-846-079-60	Sequence 60, Appl
850	31	63.3	546	4	US-10-451-467A-552	Sequence 552, App	923	30	61.2	15	4	US-10-846-079-57	Sequence 57, Appl
851	31	63.3	550	4	US-10-451-467A-476	Sequence 476, App	924	30	61.2	23	3	US-09-828-708-62	Sequence 62, Appl
852	31	63.3	550	4	US-10-451-467A-580	Sequence 580, App	925	30	61.2	23	5	US-10-630-009-62	Sequence 62, Appl
853	31	63.3	550	4	US-10-451-467A-688	Sequence 688, App	926	30	61.2	25	4	US-10-425-115-226028	Sequence 226028,
854	31	63.3	559	4	US-10-425-115-195769	Sequence 195769,	927	30	61.2	39	4	US-10-437-963-158643	Sequence 158643,
855	31	63.3	561	4	US-10-425-115-264883	Sequence 264883,	928	30	61.2	44	3	US-10-425-115-334928	Sequence 334928,
856	31	63.3	564	4	US-10-437-963-177423	Sequence 177423,	929	30	61.2	44	4	US-10-242-515-1452	Sequence 1452, Ap
857	31	63.3	568	4	US-10-425-115-251011	Sequence 251011,	930	30	61.2	46	4	US-10-724-972A-719	Sequence 7189, Ap
858	31	63.3	572	4	US-10-424-599-280962	Sequence 280962,	931	30	61.2	47	4	US-10-437-963-113763	Sequence 113763,
859	31	63.3	576	4	US-10-425-114-64325	Sequence 64325, A	932	30	61.2	47	4	US-10-425-115-158815	Sequence 358815,
860	31	63.3	589	6	US-11-097-143-40527	Sequence 40527, A	933	30	61.2	55	4	US-10-767-701-4857	Sequence 34857, A
861	31	63.3	601	5	US-10-732-923-2611	Sequence 2611, Ap	934	30	61.2	55	4	US-10-424-599-263370	Sequence 263370,
862	31	63.3	602	5	US-10-732-923-2614	Sequence 2614, Ap	935	30	61.2	56	4	US-10-425-115-344005	Sequence 344005,
863	31	63.3	602	5	US-11-097-143-26013	Sequence 26013, A	936	30	61.2	63	4	US-10-425-115-174281	Sequence 174281,
864	31	63.3	606	4	US-10-437-963-195106	Sequence 195106,	937	30	61.2	63	4	US-10-424-599-174281	Sequence 239698,
865	31	63.3	616	4	US-10-108-260A-4205	Sequence 4205, Ap	938	30	61.2	66	4	US-10-425-115-339698	Sequence 279219,
866	31	63.3	616	4	US-10-276-774-1401	Sequence 1401, Ap	939	30	61.2	66	4	US-10-425-115-279219	Sequence 323997,
867	31	63.3	635	4	US-10-437-963-196546	Sequence 196546,	940	30	61.2	68	4	US-10-425-115-229000	Sequence 229000,
868	31	63.3	640	4	US-10-306-905-2	Sequence 2, Appl1	941	30	61.2	68	4	US-10-424-599-118194	Sequence 218194,
869	31	63.3	675	5	US-10-505-486-85	Sequence 85, Appl	942	30	61.2	69	4	US-10-424-599-120816	Sequence 20816,
870	31	63.3	692	4	US-10-159-257A-191	Sequence 191, App	943	30	61.2	70	4	US-10-424-599-120816	Sequence 20816,
871	31	63.3	709	5	US-10-732-923-2613	Sequence 2613, Ap	944	30	61.2	71	4	US-10-424-599-120816	Sequence 20816,
872	31	63.3	709	6	US-11-097-143-7659	Sequence 7659, Ap	945	30	61.2	71	4	US-10-425-115-338383	Sequence 238383,
873	31	63.3	709	6	US-11-097-143-7659	Sequence 7659, Ap	946	30	61.2	71	4	US-10-425-115-266011	Sequence 266011,
874	31	63.3	747	4	US-10-437-963-201472	Sequence 201472,	947	30	61.2	73	4	US-10-437-963-152818	Sequence 152818,
875	31	63.3	755	4	US-10-437-963-193201	Sequence 193201,	948	30	61.2	80	4	US-10-424-599-182329	Sequence 182329,
876	31	63.3	776	4	US-10-104-047-2108	Sequence 2108, Ap	949	30	61.2	80	4	US-10-363-369-17	Sequence 17, Appl
877	31	63.3	863	4	US-10-437-963-188081	Sequence 188081, Ap	950	30	61.2	80	4	US-10-425-115-303208	Sequence 303208,
878	31	63.3	887	6	US-11-097-143-32685	Sequence 32685, A	951	30	61.2	81	4	US-10-437-963-188621	Sequence 188621,
879	31	63.3	890	4	US-10-437-963-118530	Sequence 118530, A	952	30	61.2	82	4	US-10-424-599-120816	Sequence 20816,
880	31	63.3	900	4	US-10-282-122A-51950	Sequence 51950, A	953	30	61.2	87	4	US-10-424-599-255441	Sequence 255441,
881	31	63.3	912	4	US-10-094-749-2005	Sequence 2005, Ap	954	30	61.2	88	4	US-10-424-599-240571	Sequence 240571,
882	31	63.3	986	4	US-10-437-963-203873	Sequence 203873,	955	30	61.2	89	4	US-10-425-115-336386	Sequence 336386,
883	31	63.3	1025	3	US-09-854-886-2	Sequence 2, Appl1	956	30	61.2	90	4	US-10-106-628-5025	Sequence 5025, Ap
884	31	63.3	1025	3	US-10-631-467-572	Sequence 572, App	957	30	61.2	92	4	US-10-363-204-80	Sequence 90, Appl
885	31	63.3	1031	6	US-11-097-143-3594	Sequence 3594, Ap	958	30	61.2	93	4	US-10-424-599-91300	Sequence 191300,
886	31	63.3	1059	4	US-10-437-963-150232	Sequence 150232,	959	30	61.2	93	4	US-10-437-963-105072	Sequence 105072,
887	31	63.3	1097	5	US-10-450-763-56014	Sequence 56014, A	960	30	61.2	94	4	US-10-424-599-186635	Sequence 186635,
888	31	63.3	1224	4	US-10-282-122A-33681	Sequence 63681, A	961	30	61.2	94	4	US-10-425-115-368456	Sequence 368456,
889	31	63.3	1238	4	US-10-437-963-182885	Sequence 182885,	962	30	61.2	95	4	US-10-363-204-91	Sequence 91, Appl
890	31	63.3	1239	4	US-10-437-963-116416	Sequence 116416,	963	30	61.2	96	4	US-10-425-114-44340	Sequence 54340, A
891	31	63.3	1482	4	US-10-437-963-146967	Sequence 146967,	964	30	61.2	96	4	US-10-437-963-142917	Sequence 142917,
892	31	63.3	1631	5	US-10-450-763-52840	Sequence 52840, A	965	30	61.2	96	4	US-10-424-599-200992	Sequence 200992,
893	31	63.3	1770	5	US-10-732-923-17002	Sequence 17002, A	966	30	61.2	97	4	US-10-437-963-120354	Sequence 120354,
894	31	63.3	1971	4	US-10-437-963-105745	Sequence 105745,	967	30	61.2	97	4	US-10-023-988B-37	Sequence 37, Appl
895	31	63.3	2054	4	US-10-437-963-170201	Sequence 170201,	968	30	61.2	98	4	US-10-023-432A-37	Sequence 37, Appl
896	31	63.3	2211	5	US-10-732-923-17003	Sequence 17003, A	969	30	61.2	98	4	US-10-023-968B-37	Sequence 37, Appl
897	31	63.3	3427	4	US-10-408-765A-1624	Sequence 1624, Ap	970	30	61.2	98	4	US-10-424-599-779823	Sequence 779823,
898	31	63.3	3431	4	US-10-461-194-102	Sequence 102, App	971	30	61.2	101	4	US-10-424-599-779823	Sequence 779823,
899	31	63.3	3460	5	US-10-723-860-3739	Sequence 3739, Ap	972	30	61.2	101	4	US-10-425-115-231386	Sequence 231386,
900	31	63.3	3460	5	US-10-753-267-46	Sequence 46, Appl	973	30	61.2	102	4	US-10-425-115-231386	Sequence 231386,
901	31	63.3	3460	5	US-11-019-829-22	Sequence 22, Appl	974	30	61.2	103	4	US-10-156-761-13327	Sequence 13327, A
902	31	63.3	3470	6	US-10-450-763-55656	Sequence 55656, A	975	30	61.2	103	4	US-10-425-115-212660	Sequence 212660,
903	31	63.3	3843	6	US-11-097-143-41379	Sequence 41379, A	976	30	61.2	103	4	US-10-425-115-212660	Sequence 212660,

```
977 30 61.2 104 3 US-09-925-297-705 Sequence 705, App
978 30 61.2 104 4 US-10-425-115-196833 Sequence 196833,
979 30 61.2 105 4 US-10-425-115-298542 Sequence 298542,
980 30 61.2 105 5 US-10-732-923-15669 Sequence 15669, A
981 30 61.2 107 4 US-10-424-599-233902 Sequence 233902,
982 30 61.2 107 4 US-10-767-701-46670 Sequence 46670, A
983 30 61.2 107 4 US-10-767-701-49720 Sequence 49720, A
984 30 61.2 107 5 US-10-732-923-15752 Sequence 15752, A
985 30 61.2 107 5 US-10-732-923-15756 Sequence 15756, A
986 30 61.2 109 4 US-10-425-115-290118 Sequence 290118,
987 30 61.2 110 4 US-10-425-115-291738 Sequence 291738,
988 30 61.2 111 5 US-10-732-923-15721 Sequence 15721, A
989 30 61.2 113 4 US-10-437-963-169707 Sequence 169707,
990 30 61.2 114 3 US-09-828-708-13 Sequence 13, Appl
991 30 61.2 114 5 US-10-630-009-13 Sequence 13, Appl
992 30 61.2 119 4 US-10-424-599-191250 Sequence 191250,
993 30 61.2 120 4 US-10-437-963-120344 Sequence 120344,
994 30 61.2 120 4 US-10-437-963-123051 Sequence 123051,
995 30 61.2 123 3 US-09-925-300-1501 Sequence 1501, Ap
996 30 61.2 123 4 US-10-479-670-79 Sequence 79, Appl
997 30 61.2 124 4 US-10-424-599-263929 Sequence 263929,
998 30 61.2 125 4 US-10-479-670-78 Sequence 78, Appl
999 30 61.2 126 4 US-10-425-115-225721 Sequence 225721,
1000 30 61.2 127 3 US-09-764-847-717 Sequence 717, App
```

ALIGNMENTS

```
RESULT 1
US-09-759-960-21
; Sequence 21, Application US/09759960
; Patent No. US20010006639A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; TITLE OF INVENTION: PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
```

US-09-759-960-21

Query Match 100.0%; Score 49; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTIGIVCP 9
Db 1 GTIGIVCP 9

RESULT 2

US-09-891-823-50
; Sequence 50, Application US/09891823
; Publication No. US20020110566A1
; GENERAL INFORMATION:

; APPLICANT: Neeffe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.

; FILE REFERENCE: 12071-003001
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; CURRENT APPLICATION NUMBER: US/09/891,823

; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26

; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 50

; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus

US-09-891-823-50

Query Match 100.0%; Score 49; DB 3; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTIGIVCP 9
Db 1 GTIGIVCP 9

RESULT 3

US-10-128-711-70
; Sequence 70, Application US/10128711
; Publication No. US20030099634A1
; GENERAL INFORMATION:

; APPLICANT: VITTELLO, Maria A.
; APPLICANT: CHESTNUT, Robert W.
; APPLICANT: SETTE, Alessandro D.
; APPLICANT: CELIS, Steban

; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; CTX IMMUNITY
; NUMBER OF SEQUENCES: 153
; CORRESPONDENCE ADDRESSES:

; ADDRESS: Townsend and Townsend Hourie and Crew
; STREET: Steuart Street Tower, One Market Plaza
; CITY: San Francisco
; STATE: California
; COUNTRY: US

; ZIP: 94105-1493
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/128,711
; FILING DATE: 22-Apr-2002

; CLASSIFICATION: <Unknown>

```

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/197,484
; FILING DATE: 16-FEB-1994
; APPLICATION NUMBER: US 07/935,811
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: US 07/874,491
; FILING DATE: 27-APR-1992
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; APPLICATION NUMBER: US 07/749,568
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 14137-26-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 467-9600
; TELEFAX: (206) 623-6793
; INFORMATION FOR SEQ ID NO: 70:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 70:
US-10-128-711-70

Query Match      100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1 GTLGIVCPI 9
Db      1 GTLGIVCPI 9

RESULT 4
US-10-365-908-50
; Sequence 50, Application US/10365908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neele, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 50
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-365-908-50

Query Match      100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1 GTLGIVCPI 9
Db      1 GTLGIVCPI 9

RESULT 5
```

```

US-10-472-661-9
; Sequence 9, Application US/10472661
; Publication No. US20040106551A1
; GENERAL INFORMATION:
; APPLICANT: Khleif, Samir N.
; APPLICANT: Berzofsky, Jay A.
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS IMMUNOREACTIVE
; TITLE OF INVENTION: PEPTIDES
; FILE REFERENCE: 14014.040602
; CURRENT APPLICATION NUMBER: US/10/472,661
; CURRENT FILING DATE: 2003-09-22
; PRIOR APPLICATION NUMBER: PCT/US02/09261
; PRIOR FILING DATE: 2002-03-22
; PRIOR APPLICATION NUMBER: 60/278,520
; PRIOR FILING DATE: 2001-03-23
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence; note =
; OTHER INFORMATION: synthetic construct
US-10-472-661-9

Query Match      100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1 GTLGIVCPI 9
Db      1 GTLGIVCPI 9

RESULT 6
US-10-777-053-327
; Sequence 327, Application US/10777053
; Publication No. US20040132088A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MANK.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; CURRENT FILING DATE: 2004-02-10
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 327
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papillomavirus 16
US-10-777-053-327

Query Match      100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1 GTLGIVCPI 9
Db      1 GTLGIVCPI 9

RESULT 7
US-10-777-053-494
; Sequence 494, Application US/10777053
```



```
; Publication No. US20040132086A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MAN/K.022C1
; CURRENT APPLICATION NUMBER: US/10/777,053
; CURRENT FILING DATE: 2004-02-10
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 494
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-777-053-494

Query Match          100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 1 GTLGIVCPI 9

RESULT 8
US-10-837-217-327
; Publication No. US20040203051A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MAN/K.022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; CURRENT FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 327
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-837-217-327

Query Match          100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 1 GTLGIVCPI 9

RESULT 9
US-10-837-217-494
; Sequence 494, Application US/10837217
; Publication No. US20040203051A1
; GENERAL INFORMATION:
; APPLICANT: Simard, John J. L.
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MAN/K.022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; CURRENT FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 494
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-837-217-494

Query Match          100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 1 GTLGIVCPI 9
```

```
; APPLICANT: Diamond, David C.
; APPLICANT: Qiu, Zhiyong
; APPLICANT: Lei, Xiang-Dong
; TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
; TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
; FILE REFERENCE: MAN/K.022C2
; CURRENT APPLICATION NUMBER: US/10/837,217
; CURRENT FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: 10/292,413
; PRIOR FILING DATE: 2002-11-07
; PRIOR APPLICATION NUMBER: 60/336,968
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 979
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 494
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-837-217-494

Query Match          100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 1 GTLGIVCPI 9

RESULT 10
US-10-603-062-21
; Sequence 21, Application US/10603062
; Publication No. US20040229809A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Fish & Richardson, P. C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/603,062
; FILING DATE: 24-Jun-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-543-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
```


TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 21:
US-10-603-062-21

Query Match 100.0%; Score 49; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
DB 1 GTLGVCP1 9

RESULT 11
US-10-871-138-50
Sequence 50, Application US/10871138
Publication No. US20040235741A1
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Minnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/10/871,138
CURRENT FILING DATE: 2004-06-18
PRIOR APPLICATION NUMBER: US/09/891,823
PRIOR FILING DATE: 2001-06-26
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 50
LENGTH: 9
TYPE: PRT
ORGANISM: Human papilloma virus
US-10-871-138-50

Query Match 100.0%; Score 49; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
DB 1 GTLGVCP1 9

RESULT 12
US-10-751-845-104
Sequence 104, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
CURRENT FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 104
LENGTH: 9
TYPE: PRT
ORGANISM: Human Papilloma virus

US-10-751-845-104

Query Match 100.0%; Score 49; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
DB 1 GTLGVCP1 9

RESULT 13
US-09-891-823-46
Sequence 46, Application US/09891823
Publication No. US20020110566A1
GENERAL INFORMATION:
APPLICANT: Neefe, John R.
APPLICANT: Boux, Leslie J.
APPLICANT: Minnett, Mark T.
APPLICANT: Goldstone, Stephen E.
APPLICANT: Siegel, Marvin
TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
FILE REFERENCE: 12071-003001
CURRENT APPLICATION NUMBER: US/09/891,823
CURRENT FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/214,202
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 140
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 46
LENGTH: 10
TYPE: PRT
ORGANISM: Human papilloma virus
US-09-891-823-46

Query Match 100.0%; Score 49; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
DB 2 GTLGVCP1 10

RESULT 14
US-09-888-721-8
Sequence 8, Application US/09888721
Patent No. US20020132990A1
GENERAL INFORMATION:
APPLICANT: Huston, James S.
APPLICANT: Wils, Pierre
APPLICANT: Zhu, Quan
APPLICANT: Laurent, Olivier
APPLICANT: Marasco, Wayne A.
APPLICANT: Scherman, Daniel
TITLE OF INVENTION: BIOENGINEERED VEHICLES FOR TARGETED NUCLEIC ACID
FILE REFERENCE: 23611-A USA
CURRENT APPLICATION NUMBER: US/09/888,721
CURRENT FILING DATE: 2001-06-25
PRIOR APPLICATION NUMBER: 60/213,653
PRIOR FILING DATE: 2000-06-23
NUMBER OF SEQ ID NOS: 45
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 8
LENGTH: 10
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-888-721-8

Query Match 100.0%; Score 49; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	GTGIVCP	9
Db	1	GTGIVCP	9

```

RESULT 15
US-10-365-908-46
; Sequence 46, Application US/103655908
; Publication No. US20030170268A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Winnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marvin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/365,908
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 46
; LENGTH: 10
; TYPE: prt
; ORGANISM: Human papilloma virus
US-10-365-908-46

```

Query Match	100.0%;	Score 49;	DB 4;	Length 10;
Best Local Similarity	100.0%;	Pred. No. 0.039;		
Matches	9;	Conservative	0;	Mismatches 0;
				Indels 0;
				Gaps 0;

Qy	1	GTGIVCPI	9
Db	2	GTGIVCPI	10

```

RESULT 16
US-10-668-400-10
; Sequence 10, Application US/10668400
; Publication No. US20040058859A1
GENERAL INFORMATION:
APPLICANT: Bay, Sylvie
APPLICANT: Cantacuzene, Daniele
APPLICANT: Leclerc, Claude
APPLICANT: Lo-Man, Richard
TITLE OF INVENTION: MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,
TITLE OF INVENTION: VACCINE COMPRISING THE SAME AND USE THEREOF
FILE REFERENCE: 102.166A-1
CURRENT APPLICATION NUMBER: US/10/668,400
CURRENT FILING DATE: 2003-09-23
PRIOR APPLICATION NUMBER: US 09/049,847
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: US 60/041,726
PRIOR FILING DATE: 1997-03-27
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn version 3.1
SEQ ID NO 10
LENGTH: 10
TYPE: PRT
ORGANISM: Human papillomavirus type 16
FEATURE:
NAME/KEY: MISC_FEATURE
OTHER INFORMATION: HPV16 E7 PEPTIDE
US-10-668-400-10

```

Query Match	100.0%;	Score 49;	DB 4;	Length 10;					
Best Local Similarity	100.0%;	Pred. No. 0.039;							
Matches	9;	Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;

Qy	1	GTGGIVCPI	9
Db	1	GTGGIVCPI	9

```

RESULT 17
US-10-871-138-46
; Sequence 46, Application US/10871138
; Publication NO. US20040235741A1
; GENERAL INFORMATION:
; APPLICANT: Neefe, John R.
; APPLICANT: Boux, Leslie J.
; APPLICANT: Minnett, Mark T.
; APPLICANT: Goldstone, Stephen E.
; APPLICANT: Siegel, Marylin
; TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS TREATMENT
; FILE REFERENCE: 12071-003001
; CURRENT APPLICATION NUMBER: US/10/871,138
; PRIORITY FILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/09/891,823
; PRIOR FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,202
; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 46
; LENGTH: 10
; TYPE: PRY
; ORGANISM: Human papilloma virus
US-10-871-138-46

```

Query Match	100.0%;	Score 49;	DB 5;	Length 10;
Best Local Similarity	100.0%;	Pred. No. 0.039;		
Matches	9;	Conservative	0;	Mismatches 0;
			Indels	0;
			Gaps	0;

QY	1	GTGIVCP	9
Db	2	GTGIVCP	10

```

RESULT 18
US-10-484-063-18
; Sequence 18, Application US/10484063
; Publication No. US20050048467A1
; GENERAL INFORMATION:
; APPLICANT: SASTRY, K. JAGANNADHA
; APPLICANT: TORTOLERO-LUNA, GUILTERMO
; APPLICANT: FOLLEN, MICHELLE
; TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
; TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CLIN
; FILE REFERENCE: US/SC:560US
; CURRENT APPLICATION NUMBER: US/10/484,063
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/23198
; PRIOR FILING DATE: 2002-07-19
; PRIOR APPLICATION NUMBER: 60/306,809
; PRIOR FILING DATE: 2001-07-20
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-484-063-18

```

Query Match	100.0%	Score 49	DB 5	Length 10
Best Local Similarity	100.0%	Pred. No. 0.039		
Matches	9	Conservative 0	Mismatches 0	Indels 0
QY	1 GTTGIVCP	1		
DB	1 GTTGIVCP	1		

RESULT 19
US-09-759-960-31
; Sequence 31, Application US/09759960
; Patent No. US2001000639A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Frazer, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Other
; LOCATION: 1...1
; OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
; OTHER INFORMATION: Arg, Lys, Gly, Gln, Asp, or Glu
; US-09-759-960-31
Query Match 100.0%; Score 49; DB 3; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GTLGIIVCP1 9
DB 2 GTLGIIVCP1 10

RESULT 20
US-09-759-960-33
; Sequence 33, Application US/09759960
; Patent No. US2001000639A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Frazer, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-759-960-33
Query Match 100.0%; Score 49; DB 3; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GTLGIIVCP1 9
DB 2 GTLGIIVCP1 10

NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-33
Query Match 100.0%; Score 49; DB 3; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GTLGIIVCP1 9
DB 2 GTLGIIVCP1 10

RESULT 21
US-10-603-062-31
; Sequence 31, Application US/10603062
; Publication No. US20040229809A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiciz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/603,062
; FILING DATE: 24-Jun-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C

TELEX: 200154
FILING DATE: 09-OCT-1998
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Other
LOCATION: 1...1
OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
Arg, Lys, Gly, Gln, Asp, or Glu
SEQUENCE DESCRIPTION: SEQ ID NO: 31:
US-10-603-062-31

Query Match 100.0%; Score 49; DB 5; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.043;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 22
US-10-603-062-33
Sequence 33, Application US/10603062
Publication No. US2004022809A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
Chicz, Roman M.
Collins, Edward J.
Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/603,062
FILING DATE: 24-Jun-2003
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906

TELEX: 200154
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 33:
US-10-603-062-33

Query Match 100.0%; Score 49; DB 5; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 23
US-09-759-960-16
Sequence 16, Application US/09759960
Patent No. US20010006639A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
Chicz, Roman M.
Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-16

Query Match 100.0%; Score 49; DB 3; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 3 GTLGIVCPI 11

```
RESULT 24
US-09-909-460-108
; Sequence 108, Application US/09909460
; Publication No. US20020182258A1
; GENERAL INFORMATION:
; APPLICANT: Lunsford, Lynn B.
; APPLICANT: Putnam, David
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
; FILE REFERENCE: 08191/014001
; CURRENT APPLICATION NUMBER: US/09/909,460
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 108
; LENGTH: 12
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-09-909-460-108

Query Match          100.0%; Score 49; DB 3; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTTGIVCP1 9
Db 4 GTTGIVCP1 12

RESULT 25
US-09-872-836-108
; Sequence 108, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
; APPLICANT: Barman, Shikha P.
; APPLICANT: McKeever, Una
; APPLICANT: Hedley, Mary Lynne
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; PRIOR FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 108
; LENGTH: 12
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-108

Query Match          100.0%; Score 49; DB 3; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTTGIVCP1 9
Db 4 GTTGIVCP1 12

RESULT 26
US-10-603-062-16
; Sequence 16, Application US/10603062
; Publication No. US20040229809A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
```

```
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: #window95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/603,062
; FILING DATE: 24-Jun-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/169,425C
; FILING DATE: 09-OCT-1998
; APPLICATION NUMBER: 60/061,657
; FILING DATE: 09-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 16:
US-10-603-062-16

Query Match          100.0%; Score 49; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTTGIVCP1 9
Db 3 GTTGIVCP1 11

RESULT 27
US-10-758-970-108
; Sequence 108, Application US/10758970
; Publication No. US20050037086A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Hsu, Yung-Yueh
; APPLICANT: Tso, Michael
; TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
; FILE REFERENCE: 08191-012001
; CURRENT APPLICATION NUMBER: US/10/758,970
; PRIOR FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: US/09/715,708A
; PRIOR FILING DATE: 2000-11-17
; PRIOR APPLICATION NUMBER: US 60/166,516
; PRIOR FILING DATE: 1999-11-19
; NUMBER OF SEQ ID NOS: 109
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 108
; LENGTH: 12
; TYPE: PRT
; ORGANISM: Human papilloma virus
US-10-758-970-108
```

Query Match 100.0%; Score 49; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 28

US-10-751-845-62
Sequence 62, Application US/10751845
Publication No. US20050100928A1
GENERAL INFORMATION:
APPLICANT: Hedley, Mary Lynne
APPLICANT: Urban, Robert G.
APPLICANT: Chiciz, Roman M.
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
FILE REFERENCE: 08191-013001
CURRENT APPLICATION NUMBER: US/10/751,845
PRIOR FILING DATE: 2004-01-05
PRIOR APPLICATION NUMBER: US/09/664,225
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/169,846
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 60/154,665
PRIOR FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 163
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 62
LENGTH: 12
TYPE: PRT
ORGANISM: Human Papilloma virus
US-10-751-845-62

Query Match 100.0%; Score 49; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.047;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 29

US-09-759-960-3
Sequence 3, Application US/09759960
Patent No. US2001000639A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chiciz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Fraser, Janis K.

REGISTRATION NUMBER: 34,819

REFERENCE/DOCKET NUMBER: 08191/004002

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-542-5070

TELEFAX: 617-543-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

Query Match 100.0%; Score 49; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 30

US-09-759-960-4
Sequence 4, Application US/09759960
Patent No. US2001000639A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chiciz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-4

Query Match 100.0%; Score 49; DB 3; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 31

US-09-759-960-19
Sequence 19, Application US/09759960
Patent No. US20010006639A1

GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154

INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:

NAME/KEY: Other
LOCATION: 1...1
OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
OTHER INFORMATION: Arg, Lys, Gly, Gln, Asp, or Glu
US-09-759-960-19

Query Match 100.0%; Score 49; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 32
US-09-909-460-110
Sequence 110, Application US/09909460
Publication No. US20020182258A1
GENERAL INFORMATION:

APPLICANT: Lunsford, Lynn B.
APPLICANT: Putnam, David
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
TITLE OF INVENTION: ACID
FILE REFERENCE: 08191/014001
CURRENT APPLICATION NUMBER: US/09/909,460
CURRENT FILING DATE: 2001-07-18
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 110
LENGTH: 13
TYPE: PRT
ORGANISM: Human papilloma virus
US-09-909-460-110

Query Match 100.0%; Score 49; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 33
US-09-872-836-110
Sequence 110, Application US/09872836
Publication No. US20040142475A1
GENERAL INFORMATION:
APPLICANT: Barman, Shikha P.
APPLICANT: McKeever, Una
APPLICANT: Hedley, Mary Lynne
TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
FILE REFERENCE: 08191-018001
CURRENT APPLICATION NUMBER: US/09/872,836
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 60/208,830
PRIOR FILING DATE: 2000-06-02
NUMBER OF SEQ ID NOS: 120
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 110
LENGTH: 13
TYPE: PRT
ORGANISM: Homo sapiens
US-09-872-836-110

Query Match 100.0%; Score 49; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 34
US-10-603-062-3
Sequence 3, Application US/10603062
Publication No. US20040229809A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street

CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/603,062
FILING DATE: 24-Jun-2003
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-Oct-1998
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-Oct-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-10-603-062-3

Query Match 100.0%; Score 49; DB 5; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGI VCP I 9
| | | | | | | | | |
Db 4 GTLGI VCP I 12

RESULT 35
US-10-603-062-4
; Sequence 4, Application US/10603062
; Publication No. US20040229809A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
Chicz, Roman M.
Collins, Edward J.
Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/603,062
FILING DATE: 24-Jun-2003
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-Oct-1998

APPLICATION NUMBER: 60/061,657
FILING DATE: 09-Oct-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-603-062-4

Query Match 100.0%; Score 49; DB 5; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGI VCP I 9
| | | | | | | | | |
Db 4 GTLGI VCP I 12

RESULT 36
US-10-603-062-19
; Sequence 19, Application US/10603062
; Publication No. US20040229809A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
Chicz, Roman M.
Collins, Edward J.
Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/603,062
FILING DATE: 24-Jun-2003
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-Oct-1998
APPLICATION NUMBER: 60/061,657
FILING DATE: 09-Oct-1997
ATTORNEY/AGENT INFORMATION:
NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Other
LOCATION: 1...1
OTHER INFORMATION: where Xaa at position 1 is Met, Ala, Ser,
Arg, Lys, Gly, Gln, Asp, or Glu
SEQUENCE DESCRIPTION: SEQ ID NO: 19;
US-10-603-062-19

Query Match 100.0%; Score 49; DB 5; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 37
US-09-759-960-32
Sequence 32, Application US/09759960
Patent No. US20010006639A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn
TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/759,960
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/169,425
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-759-960-32

Query Match 100.0%; Score 49; DB 3; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.055;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 38

US-10-603-062-32
Sequence 32, Application US/10603062
Publication No. US20040229809A1
GENERAL INFORMATION:
APPLICANT: Urban, Robert G.
APPLICANT: Chicz, Roman M.
APPLICANT: Collins, Edward J.
APPLICANT: Hedley, Mary Lynn

TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
TITLE OF INVENTION: PROTEIN

NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: US

ZIP: 02110-2804
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/603,062
FILING DATE: 24-Jun-2003

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/169,425C
FILING DATE: 09-OCT-1998

APPLICATION NUMBER: 60/061,657
FILING DATE: 09-OCT-1997

ATTORNEY/AGENT INFORMATION:
NAME: Frazer, Janis K.
REGISTRATION NUMBER: 34,819

REFERENCE/DOCKET NUMBER: 08191/004002
TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-542-5070
TELEFAX: 617-543-8906
TELEX: 200154

INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:

LENGTH: 14 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 32;
US-10-603-062-32

Query Match 100.0%; Score 49; DB 5; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.055;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10

RESULT 39

US-10-648-547-71
Sequence 71, Application US/10648547
Publication No. US20040147044A1

GENERAL INFORMATION:
APPLICANT: Mitelman, Abraham

APPLICANT: Kanduc, Darja
TITLE OF INVENTION: Improved Antigens

TITLE OF INVENTION: Improved Antigens
CURRENT APPLICATION NUMBER: US/10/648,547

PRIOR FILING DATE: 2003-08-25
CURRENT APPLICATION NUMBER: 10/306,541

PRIOR FILING DATE: 11-25-2002
PRIOR APPLICATION NUMBER: 60/333,249

PRIOR FILING DATE: 11-23-2001

```
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 71
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-71
```

```
Query Match          100.0%; Score 49; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10
```

```
RESULT 40
US-10-648-547-84
; Sequence 84, Application US/10648547
; Publication No. US20040147044A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/9
; CURRENT APPLICATION NUMBER: US/10/648,547
; PRIOR FILING DATE: 2003-08-25
; PRIOR APPLICATION NUMBER: 10/306,541
; PRIOR FILING DATE: 11-25-2002
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 11-23-2001
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 84
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-648-547-84
```

```
Query Match          100.0%; Score 49; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 GTLGIVCPI 9
Db 6 GTLGIVCPI 14
```

```
RESULT 41
US-10-476-570-52
; Sequence 52, Application US/10476570
; Publication No. US20040170644A1
; GENERAL INFORMATION:
; APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
; APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; APPLICANT: MAILLIERE, Bernard
; APPLICANT: BOURGAULT-VILLADA, Isabelle
; APPLICANT: POUVELLE-MORATILLE, Sandra
; APPLICANT: GUILLET, Jean-Gerard
; TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
; FILE REFERENCE: 45636-5071-US
; CURRENT APPLICATION NUMBER: US/10/476,570
; PRIOR FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: PCT/FR02/01533
; PRIOR FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: FR 01 05980
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 52
; LENGTH: 15
```

```
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of the artificial sequence: peptide E7 84-98
US-10-476-570-52
```

```
Query Match          100.0%; Score 49; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10
```

```
RESULT 42
US-10-306-541-71
; Sequence 71, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; PRIOR FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 71
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-71
```

```
Query Match          100.0%; Score 49; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 GTLGIVCPI 9
Db 2 GTLGIVCPI 10
```

```
RESULT 43
US-10-306-541-84
; Sequence 84, Application US/10306541
; Publication No. US20040171081A1
; GENERAL INFORMATION:
; APPLICANT: Mitelman, Abraham
; APPLICANT: Kanduc, Darja
; TITLE OF INVENTION: Improved Antigens
; FILE REFERENCE: 12354/4
; CURRENT APPLICATION NUMBER: US/10/306,541
; PRIOR FILING DATE: 2003-11-25
; PRIOR APPLICATION NUMBER: 60/333,249
; PRIOR FILING DATE: 2001-11-23
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: WordPerfect 8.0 for Windows
; SEQ ID NO 84
; LENGTH: 15
; TYPE: PRT
; ORGANISM: human papillomavirus
US-10-306-541-84
```

```
Query Match          100.0%; Score 49; DB 4; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.059;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 GTLGIVCPI 9
Db 6 GTLGIVCPI 14
```

```

RESULT 44
US-09-759-960-25
; Sequence 25, Application US/09759960
; Patent No. US20010006639A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; APPLICANT: Chicz, Roman M.
; APPLICANT: Collins, Edward J.
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: PatSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/759,960
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/169,425
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraiser, Janis K.
; REGISTRATION NUMBER: 34,819
; REFERENCE/DOCKET NUMBER: 08191/004002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-543-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
;
US-09-759-960-25
Query Match 100.0%; Score 49; DB 3; Length 16;
Best Local Similarity 100.0%; Pred.No. 0.063;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0
QY 1 GTLGIVCP1 9 |||||
DB 4 GTLGIVCP1 12

```

```

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 109
; LENGTH: 16
; TYPE: PROT
; ORGANISM: Human papilloma virus
US-09-909-460-109

Query Match          100.0%; Score 49; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.063;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GTLGIVCP1 9
        |||||
        4 GTLGIVCP1 12

DB      4 GTLGIVCP1 12

Query Match          100.0%; Score 49; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.063;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GTLGIVCP1 9
        |||||
        4 GTLGIVCP1 12

DB      4 GTLGIVCP1 12

RESULT 47
US-10-603-062-25
; Sequence 25, Application US/10603062
; Publication No. US20040229809A1
; GENERAL INFORMATION:
; APPLICANT: Urban, Robert G.
; Chicz, Roman M.
; Collins, Edward J.
; Hedley, Mary Lynn
; TITLE OF INVENTION: IMMUNOGENIC PEPTIDES FROM THE HPV E7
; PROTEIN
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/603,062

```

```
/
/ FILING DATE: 24-Jun-2003
/ PRIORITY APPLICATION DATA:
/ APPLICATION NUMBER: US/09/169,425C
/ FILING DATE: 09-OCT-1998
/ APPLICATION NUMBER: 60/061,657
/ FILING DATE: 09-OCT-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Fraser, Janis K.
/ REGISTRATION NUMBER: 34,819
/ REFERENCE/DOCKET NUMBER: 08191/004002
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-542-5070
/ TELEFAX: 617-543-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 25:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 16 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-10-603-062-25

Query Match      100.0%; Score 49; DB 5; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.063;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 48
US-10-758-970-109
/ Sequence 109, Application US/10758970
/ Publication No. US20050037086A1
/ GENERAL INFORMATION:
/ APPLICANT: Hedley, Mary Lynne
/ APPLICANT: Heu, Yung-Yueh
/ APPLICANT: Tyo, Michael
/ TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
/ FILE REFERENCE: 08191-012001
/ CURRENT FILING DATE: US/10/758,970
/ PRIOR FILING DATE: 2004-01-16
/ PRIOR APPLICATION NUMBER: US/09/715,708A
/ PRIOR FILING DATE: 2000-11-17
/ PRIOR APPLICATION NUMBER: US 60/166,516
/ PRIOR FILING DATE: 1999-11-19
/ NUMBER OF SEQ ID NOS: 109
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 109
/ LENGTH: 16
/ TYPE: PRT
/ ORGANISM: Human papilloma virus
US-10-758-970-109

Query Match      100.0%; Score 49; DB 5; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.063;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 49
US-10-751-845-69
/ Sequence 69, Application US/10751845
/ Publication No. US20050100928A1
/ GENERAL INFORMATION:
/ APPLICANT: Hedley, Mary Lynne
/ APPLICANT: Urban, Robert G.
/ APPLICANT: Chicz, Roman M.
```

```
/
/ TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
/ FILE REFERENCE: 08191-013001
/ CURRENT FILING DATE: US/10/751,845
/ CURRENT FILING DATE: 2004-01-05
/ PRIOR APPLICATION NUMBER: US/09/664,225
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: US 60/169,846
/ PRIOR FILING DATE: 1999-12-09
/ PRIOR APPLICATION NUMBER: US 60/154,665
/ PRIOR FILING DATE: 1999-09-16
/ NUMBER OF SEQ ID NOS: 163
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 69
/ LENGTH: 17
/ TYPE: PRT
/ ORGANISM: Human Papilloma virus
US-10-751-845-69

Query Match      100.0%; Score 49; DB 5; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.067;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 4 GTLGIVCPI 12

RESULT 50
US-10-476-570-58
/ Sequence 58, Application US/10476570
/ Publication No. US20040170644A1
/ GENERAL INFORMATION:
/ APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE
/ APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
/ APPLICANT: MAILLERE, Bernard
/ APPLICANT: BOURGAULT-VILLADA, Isabelle
/ APPLICANT: BOURGELLE-MORATILLE, Sandra
/ APPLICANT: GUILLET, Jean-Gerard
/ TITLE OF INVENTION: Mixture of peptides derived from E6 and/or E7
/ FILE REFERENCE: 45636-5071-US
/ CURRENT FILING DATE: US/10/476,570
/ PRIOR FILING DATE: 2003-11-04
/ PRIOR APPLICATION NUMBER: PCT/FR02/01533
/ PRIOR FILING DATE: 2002-05-03
/ PRIOR APPLICATION NUMBER: FR 01 05980
/ PRIOR FILING DATE: 2001-05-04
/ NUMBER OF SEQ ID NOS: 63
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 58
/ LENGTH: 19
/ TYPE: PRT
/ ORGANISM: artificial sequence
/ FEATURE:
/ OTHER INFORMATION: Description of the artificial sequence: peptide E7 79-97
US-10-476-570-58

Query Match      100.0%; Score 49; DB 4; Length 19;
Best Local Similarity 100.0%; Pred. No. 0.075;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVCPI 9
Db 7 GTLGIVCPI 15
```

Search completed: May 5, 2006, 08:39:44
Job time : 62 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 08:29:56 ; Search time 8.4 Seconds
(without alignments)
49.591 Million cell updates/sec

Title: US-08-170-344-19

Perfect score: 49
Sequence: 1 GTGIVCFPI 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 235405 seqs, 46284737 residues

Total number of hits satisfying chosen parameters: 235405

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

Published Applications_AA_New:*
1: /SIDS5/ptodata/1/pubppaa/US08_NEW_PUB.pep1:*
2: /SIDS5/ptodata/1/pubppaa/US06_NEW_PUB.pep:*
3: /SIDS5/ptodata/1/pubppaa/US07_NEW_PUB.pep:*
4: /SIDS5/ptodata/1/pubppaa/US08_NEW_PUB.pep:*
5: /SIDS5/ptodata/1/pubppaa/PCT_NEW_PUB.pep:*
6: /SIDS5/ptodata/1/pubppaa/US05_NEW_PUB.pep:*
7: /SIDS5/ptodata/1/pubppaa/US09_NEW_PUB.pep1:*
8: /SIDS5/ptodata/1/pubppaa/US10_NEW_PUB.pep:*
9: /SIDS5/ptodata/1/pubppaa/US10_NEW_PUB.pep1:*
10: /SIDS5/ptodata/1/pubppaa/US11_NEW_PUB.pep1:*
11: /SIDS5/ptodata/1/pubppaa/US11_NEW_PUB.pep1:*
12: /SIDS5/ptodata/1/pubppaa/US60_NEW_PUB.pep1:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	49	100.0	15	9	US-10-530-061-1714
2	49	100.0	15	9	US-10-530-061-1715
3	49	100.0	98	8	US-10-511-814-8
4	49	100.0	98	8	US-10-511-814-11
5	49	100.0	98	8	US-10-530-253-14
6	49	100.0	98	11	US-11-179-478-4
7	49	100.0	248	9	US-10-530-253-1
8	49	100.0	248	9	US-10-530-253-3
9	49	100.0	248	9	US-10-530-253-7
10	49	100.0	248	9	US-10-530-253-9
11	49	100.0	256	11	US-11-192-923A-2
12	41	83.7	99	9	US-10-530-253-30
13	39	79.6	82	9	US-10-485-517-372
14	37	75.5	15	9	US-10-530-061-1123
15	37	75.5	98	8	US-10-530-253-28
16	37	75.5	179	11	US-11-106-399-10
17	37	75.5	248	9	US-10-530-253-5
18	37	75.5	248	9	US-10-530-253-11
19	37	75.5	486	11	US-11-188-298-4455
20	37	75.5	1379	11	US-11-114-962-4
21	36	73.5	15	9	US-10-530-061-1726

22	36	73.5	15	9	US-10-530-061-1727	Sequence 1727, Ap
23	36	73.5	15	9	US-10-530-061-1733	Sequence 1733, Ap
24	36	73.5	15	9	US-10-530-061-1734	Sequence 1734, Ap
25	36	73.5	97	9	US-10-530-253-29	Sequence 29, Appl
26	36	73.5	99	9	US-10-530-253-34	Sequence 34, Appl
27	36	73.5	555	11	US-11-188-298-18750	Sequence 18750, A
28	36	73.5	788	11	US-11-188-298-4463	Sequence 4463, Ap
29	36	73.5	798	11	US-11-188-298-7394	Sequence 7394, Ap
30	36	73.5	204	11	US-11-072-512-2253	Sequence 2253, Ap
31	35	71.4	162	11	US-11-055-822-788	Sequence 788, App
32	35	71.4	162	11	US-11-188-298-8523	Sequence 8523, Ap
33	35	71.4	163	11	US-11-188-298-10878	Sequence 10878, A
34	35	71.4	163	11	US-11-188-298-12303	Sequence 12303, A
35	35	71.4	471	11	US-11-098-686-11340	Sequence 11340, A
36	35	71.4	484	11	US-11-188-298-8186	Sequence 8186, Ap
37	35	71.4	485	11	US-11-188-298-15333	Sequence 15333, A
38	35	71.4	486	11	US-11-188-298-16022	Sequence 16022, A
39	35	71.4	503	11	US-11-188-298-10771	Sequence 10771, A
40	35	71.4	535	11	US-11-096-568A-26450	Sequence 26450, A
41	35	71.4	592	11	US-11-096-568A-26449	Sequence 26449, A
42	35	71.4	1003	11	US-11-096-568A-31774	Sequence 31774, A
43	35	71.4	1023	11	US-11-096-568A-31773	Sequence 31772, A
44	35	71.4	1054	11	US-11-096-568A-31772	Sequence 31772, A
45	34	69.4	435	11	US-11-188-298-5983	Sequence 5983, Ap
46	34	69.4	491	11	US-11-188-298-6233	Sequence 6233, Ap
47	34	69.4	497	11	US-11-188-298-3033	Sequence 3033, Ap
48	34	69.4	796	11	US-11-188-298-10633	Sequence 10633, A
49	34	69.4	1051	11	US-10-204-639-15	Sequence 15, Appl
50	34	69.4	1051	9	US-10-530-253-40	Sequence 40, Appl
51	33	67.3	291	11	US-11-188-298-947	Sequence 947, Ap
52	33	67.3	384	9	US-10-501-035-209	Sequence 209, App
53	33	67.3	396	11	US-11-087-099-8866	Sequence 8866, Ap
54	33	67.3	400	11	US-11-188-298-12544	Sequence 12544, A
55	33	67.3	2591	9	US-10-453-372-118	Sequence 118, App
56	33	67.3	2602	9	US-10-453-372-116	Sequence 716, App
57	33	67.3	2617	9	US-10-453-372-666	Sequence 666, App
58	33	67.3	2617	9	US-10-453-372-732	Sequence 732, App
59	33	67.3	2617	9	US-10-453-372-734	Sequence 734, App
60	33	67.3	2617	9	US-10-453-372-736	Sequence 736, App
61	33	67.3	2617	9	US-10-453-372-738	Sequence 738, App
62	33	67.3	2617	9	US-10-453-372-740	Sequence 740, App
63	33	67.3	2617	9	US-10-453-372-742	Sequence 742, App
64	33	67.3	2617	9	US-10-453-372-744	Sequence 744, App
65	33	67.3	2617	9	US-10-453-372-746	Sequence 746, App
66	33	67.3	2617	9	US-10-453-372-748	Sequence 748, App
67	33	67.3	2617	9	US-10-453-372-750	Sequence 750, App
68	33	65.3	15	9	US-10-530-061-662	Sequence 662, App
69	32	65.3	72	9	US-10-644-807-438	Sequence 438, App
70	32	65.3	98	9	US-10-530-253-36	Sequence 36, Appl
71	32	65.3	186	11	US-11-188-298-1957	Sequence 1957, Ap
72	32	65.3	233	11	US-10-511-937-2414	Sequence 2414, Ap
73	32	65.3	329	11	US-11-188-298-1499	Sequence 1499, Ap
74	32	65.3	347	11	US-11-188-298-4593	Sequence 4593, Ap
75	32	65.3	357	9	US-10-506-454-307	Sequence 307, App
76	32	65.3	374	11	US-11-188-298-5814	Sequence 5814, Ap
77	32	65.3	379	11	US-11-188-298-17381	Sequence 17381, A
78	32	65.3	410	11	US-11-045-004-2697	Sequence 2697, Ap
79	32	65.3	410	11	US-11-188-298-9180	Sequence 9180, Ap
80	32	65.3	448	8	US-11-188-298-11564	Sequence 11564, A
81	32	65.3	448	11	US-10-975-652-15	Sequence 15, Appl
82	32	65.3	448	11	US-11-112-882-24	Sequence 24, Appl
83	32	65.3	448	11	US-11-112-882-64	Sequence 64, Appl
84	32	65.3	448	11	US-11-112-882-65	Sequence 65, Appl
85	32	65.3	448	11	US-11-112-882-66	Sequence 66, Appl
86	32	65.3	448	11	US-11-112-882-67	Sequence 67, Appl
87	32	65.3	448	11	US-11-112-882-51	Sequence 51, Appl
88	32	65.3	448	11	US-10-995-551-815	Sequence 815, App
89	32	65.3	494	11	US-11-188-298-573	Sequence 573, App
90	32	65.3	506	9	US-10-467-657-2088	Sequence 2088, Ap
91	32	65.3	540	11	US-11-096-568A-6039	Sequence 6039, Ap

95	32	65.3	541	11	US-11-096-568A-32068	Sequence 32068, A	168	31	63.3	1025	11	US-11-169-041-164	Sequence 164, App
96	32	65.3	550	9	US-10-523-503-54	Sequence 54, Appl	169	31	63.3	3460	8	US-10-505-928-104	Sequence 104, App
97	32	65.3	571	11	US-11-188-298-20583	Sequence 20583, A	170	30	61.2	13	9	US-10-530-061-658	Sequence 658, App
98	32	65.3	572	11	US-11-188-298-20841	Sequence 20841, A	171	30	61.2	11	9	US-10-970-047-118	Sequence 18, Appl
99	32	65.3	593	11	US-11-188-298-11982	Sequence 11982, A	172	30	61.2	33	9	US-10-970-847-28	Sequence 28, Appl
100	32	65.3	593	11	US-11-188-298-14123	Sequence 14123, A	173	30	61.2	12	9	US-10-895-064-2806	Sequence 2806, App
101	32	65.3	593	11	US-11-188-298-18740	Sequence 18740, A	174	30	61.2	32	11	US-11-129-741-2806	Sequence 2806, App
102	32	65.3	594	11	US-11-188-298-18849	Sequence 18849, A	175	30	61.2	80	11	US-11-188-576-5	Sequence 5, Appl1
103	32	65.3	595	11	US-11-188-298-18101	Sequence 18101, A	176	30	61.2	133	11	US-11-188-298-15461	Sequence 16461, A
104	32	65.3	595	11	US-11-188-298-20667	Sequence 20667, A	177	30	61.2	161	11	US-11-096-568A-22275	Sequence 22275, A
105	32	65.3	600	11	US-11-188-298-14041	Sequence 14041, A	178	30	61.2	162	11	US-11-096-568A-22274	Sequence 22274, A
106	32	65.3	615	11	US-11-096-568A-31197	Sequence 31197, A	179	30	61.2	166	11	US-11-096-568A-7039	Sequence 7039, App
107	32	65.3	656	9	US-10-995-561-871	Sequence 871, App	180	30	61.2	169	11	US-11-096-568A-10270	Sequence 10270, A
108	32	65.3	659	9	US-10-793-626-1596	Sequence 1596, App	181	30	61.2	173	11	US-11-096-568A-10269	Sequence 10269, A
109	32	65.3	679	11	US-10-995-561-872	Sequence 872, App	182	30	61.2	190	11	US-11-188-298-15108	Sequence 15108, A
110	32	65.3	707	11	US-11-096-568A-31196	Sequence 31196, A	183	30	61.2	197	11	US-11-096-568A-7038	Sequence 7038, App
111	32	65.3	725	11	US-11-096-568A-31195	Sequence 31195, A	184	30	61.2	204	11	US-11-188-298-20019	Sequence 20019, A
112	31.5	64.3	545	9	US-10-453-372-222	Sequence 31195, A	185	30	61.2	213	11	US-11-188-298-5978	Sequence 5978, App
113	31	63.3	19	9	US-10-467-657-9055	Sequence 871, App	186	30	61.2	222	11	US-11-188-298-8812	Sequence 8812, App
114	31	63.3	101	9	US-10-530-253-37	Sequence 9055, App	187	30	61.2	227	11	US-11-096-568A-7037	Sequence 7037, App
115	31	63.3	107	9	US-10-530-253-37	Sequence 37, Appl	188	30	61.2	245	11	US-11-079-463-9069	Sequence 9069, App
116	31	63.3	109	9	US-10-530-253-31	Sequence 37, Appl	189	30	61.2	247	9	US-10-995-561-742	Sequence 742, App
117	31	63.3	227	11	US-11-087-099-6731	Sequence 6731, App	190	30	61.2	257	9	US-10-995-561-742	Sequence 742, App
118	31	63.3	232	11	US-11-188-298-13545	Sequence 13645, A	191	30	61.2	267	11	US-11-188-298-12836	Sequence 12836, A
119	31	63.3	239	11	US-11-188-298-22516	Sequence 22516, A	192	30	61.2	290	9	US-10-506-454-240	Sequence 240, App
120	31	63.3	240	9	US-10-506-454-1172	Sequence 1172, App	193	30	61.2	305	11	US-11-096-568A-13545	Sequence 13545, A
121	31	63.3	250	11	US-11-188-298-13254	Sequence 13254, A	194	30	61.2	323	11	US-11-188-298-11539	Sequence 11539, A
122	31	63.3	265	11	US-11-188-298-5776	Sequence 5776, App	195	30	61.2	329	11	US-11-096-568A-25850	Sequence 25850, A
123	31	63.3	277	11	US-11-188-298-3162	Sequence 3162, App	196	30	61.2	333	11	US-11-045-004-342	Sequence 342, App
124	31	63.3	284	11	US-11-096-568A-24473	Sequence 24473, App	197	30	61.2	345	11	US-11-072-512-3496	Sequence 3496, App
125	31	63.3	320	11	US-11-072-512-2641	Sequence 2641, App	198	30	61.2	345	11	US-11-096-568A-17189	Sequence 17189, A
126	31	63.3	329	11	US-11-096-568A-27521	Sequence 27521, App	199	30	61.2	360	9	US-10-506-454-830	Sequence 830, App
127	31	63.3	339	11	US-11-188-298-312	Sequence 312, App	200	30	61.2	360	11	US-11-096-568A-25849	Sequence 25849, A
128	31	63.3	332	11	US-11-096-568A-20285	Sequence 20285, A	201	30	61.2	369	11	US-11-188-298-17616	Sequence 17616, A
129	31	63.3	334	11	US-11-188-298-12554	Sequence 12554, A	202	30	61.2	369	11	US-11-188-298-17616	Sequence 17616, A
130	31	63.3	338	11	US-11-096-568A-27520	Sequence 27520, A	203	30	61.2	376	11	US-11-096-568A-25836	Sequence 25836, App
131	31	63.3	346	9	US-10-506-454-305	Sequence 305, App	204	30	61.2	385	11	US-11-096-568A-25848	Sequence 25848, App
132	31	63.3	367	11	US-11-096-568A-20284	Sequence 20284, A	205	30	61.2	392	11	US-11-188-298-21147	Sequence 21147, A
133	31	63.3	368	11	US-11-188-298-11332	Sequence 11332, A	206	30	61.2	407	11	US-11-188-298-15332	Sequence 15332, A
134	31	63.3	369	11	US-11-096-568A-28936	Sequence 28936, A	207	30	61.2	437	11	US-11-188-298-1809	Sequence 1809, App
135	31	63.3	372	11	US-11-096-568A-24472	Sequence 24472, A	208	30	61.2	445	9	US-10-995-561-746	Sequence 746, App
136	31	63.3	372	11	US-11-188-298-11736	Sequence 11736, A	209	30	61.2	454	11	US-11-045-004-131	Sequence 131, App
137	31	63.3	373	11	US-11-045-004-56	Sequence 56, Appl	210	30	61.2	457	11	US-11-045-004-198	Sequence 198, App
138	31	63.3	375	11	US-11-188-298-5165	Sequence 5165, App	211	30	61.2	459	11	US-11-087-099-1361	Sequence 1361, App
139	31	63.3	376	9	US-10-454-37-412	Sequence 412, App	212	30	61.2	471	11	US-11-045-004-1768	Sequence 1768, App
140	31	63.3	376	11	US-11-188-298-17486	Sequence 17486, A	213	30	61.2	491	9	US-10-995-561-743	Sequence 743, App
141	31	63.3	378	11	US-11-096-568A-28935	Sequence 28935, A	214	30	61.2	494	11	US-11-188-298-12254	Sequence 12254, A
142	31	63.3	379	11	US-11-096-568A-27519	Sequence 27519, A	215	30	61.2	498	11	US-11-079-463-1278	Sequence 1278, App
143	31	63.3	387	11	US-11-096-568A-20283	Sequence 20283, A	216	30	61.2	505	11	US-11-188-298-16466	Sequence 16466, App
144	31	63.3	393	11	US-11-079-463-8729	Sequence 8729, App	217	30	61.2	512	9	US-10-995-561-745	Sequence 745, App
145	31	63.3	397	9	US-10-467-657-1060	Sequence 1060, App	218	30	61.2	514	9	US-10-641-678-54	Sequence 678, App
146	31	63.3	398	11	US-11-188-298-20661	Sequence 20661, A	219	30	61.2	516	11	US-11-188-298-2624	Sequence 2624, App
147	31	63.3	411	11	US-11-188-298-10886	Sequence 10886, A	220	30	61.2	516	11	US-11-188-298-16660	Sequence 16660, A
148	31	63.3	412	11	US-11-188-298-21261	Sequence 21261, A	221	30	61.2	517	11	US-11-188-298-1378	Sequence 1378, App
149	31	63.3	419	11	US-11-096-568A-28934	Sequence 28934, A	222	30	61.2	518	11	US-11-072-512-2392	Sequence 2392, App
150	31	63.3	426	11	US-11-079-463-7547	Sequence 7547, App	223	30	61.2	550	11	US-11-096-568A-18037	Sequence 18037, A
151	31	63.3	429	11	US-11-188-298-21109	Sequence 21109, A	224	30	61.2	553	11	US-11-188-298-5727	Sequence 5727, App
152	31	63.3	430	11	US-11-079-463-8486	Sequence 8486, App	225	30	61.2	581	11	US-11-096-568A-12998	Sequence 12998, A
153	31	63.3	447	11	US-11-188-298-7951	Sequence 7951, App	226	30	61.2	587	11	US-11-188-298-70209	Sequence 70209, A
154	31	63.3	451	11	US-11-188-298-6556	Sequence 6556, App	227	30	61.2	597	11	US-11-096-568A-12997	Sequence 12997, A
155	31	63.3	458	11	US-11-079-463-9027	Sequence 9027, App	228	30	61.2	644	9	US-10-491-468-46	Sequence 46, Appl1
156	31	63.3	461	11	US-11-096-568A-2230	Sequence 2230, App	229	30	61.2	801	9	US-10-793-626-2020	Sequence 2020, App
157	31	63.3	465	11	US-11-182-016-27	Sequence 27, Appl	230	30	61.2	923	9	US-10-623-155-357	Sequence 357, App
158	31	63.3	486	11	US-11-000-463-273	Sequence 27, Appl	231	30	61.2	940	9	US-10-623-155-161	Sequence 161, App
159	31	63.3	488	11	US-11-188-298-6889	Sequence 6889, App	232	30	61.2	943	10	US-11-300-678-39	Sequence 29, Appl
160	31	63.3	488	11	US-11-010-239-14	Sequence 14, Appl	233	30	61.2	389	9	US-10-204-252-10	Sequence 10, Appl
161	31	63.3	500	11	US-11-188-298-7890	Sequence 7890, App	234	30	61.2	3390	9	US-10-204-252-20	Sequence 20, Appl
162	31	63.3	532	11	US-11-096-568A-2229	Sequence 2229, App	235	30	61.2	3390	9	US-10-204-252-20	Sequence 22, Appl
163	31	63.3	533	11	US-11-188-298-12288	Sequence 12288, A	236	30	61.2	4393	9	US-10-453-372-1142	Sequence 1142, App
164	31	63.3	561	11	US-11-096-568A-2228	Sequence 2228, App	237	30	61.2	4961	9	US-10-453-372-1132	Sequence 1132, App
165	31	63.3	776	11	US-11-072-512-2108	Sequence 2108, App	238	29.5	60.2	179	11	US-11-079-463-5447	Sequence 5447, App
166	31	63.3	948	11	US-11-079-463-10195	Sequence 10195, A	239	29	59.2	10	9	US-10-530-061-309	Sequence 309, App
167	31	63.3	1025	8	US-10-505-928-505	Sequence 505, App	240	29	59.2	10	9	US-10-530-061-310	Sequence 310, App

241	29	59.2	15	9	US-10-530-061-1713	Sequence 1713, Ap	314	29	59.2	428	10	US-11-106-014-6	Sequence 6, Appl1
242	29	59.2	15	9	US-10-530-061-1719	Sequence 1719, Ap	315	29	59.2	428	11	US-11-073-457-6	Sequence 6, Appl1
243	29	59.2	15	9	US-10-530-061-1730	Sequence 1730, Ap	316	29	59.2	428	11	US-11-073-466-6	Sequence 6, Appl1
244	29	59.2	15	9	US-10-530-061-1742	Sequence 1742, Ap	317	29	59.2	429	11	US-11-045-004-1555	Sequence 1555, Ap
245	29	59.2	15	9	US-10-530-061-1743	Sequence 1743, Ap	318	29	59.2	437	9	US-10-131-826A-466	Sequence 466, App
246	29	59.2	15	9	US-10-530-061-1744	Sequence 1744, Ap	319	29	59.2	437	9	US-10-973-115B-466	Sequence 466, App
247	29	59.2	44	11	US-11-096-568A-5646	Sequence 5646, Ap	320	29	59.2	437	9	US-10-213-535-16	Sequence 16, Appl1
248	29	59.2	45	11	US-11-000-463-441	Sequence 441, App	321	29	59.2	437	9	US-10-218-184-162	Sequence 162, App
249	29	59.2	45	11	US-11-000-463-913	Sequence 913, App	322	29	59.2	437	9	US-10-219-061-162	Sequence 162, App
250	29	59.2	57	11	US-11-264-096-414	Sequence 414, App	323	29	59.2	437	9	US-10-219-062-162	Sequence 162, App
251	29	59.2	57	11	US-11-264-096-415	Sequence 415, App	324	29	59.2	437	9	US-10-219-064-162	Sequence 162, App
252	29	59.2	60	9	US-10-467-657-1040	Sequence 1040, Ap	325	29	59.2	437	9	US-10-233-134-162	Sequence 162, App
253	29	59.2	60	9	US-10-467-657-5506	Sequence 5506, Ap	326	29	59.2	437	9	US-10-137-873A-466	Sequence 466, App
254	29	59.2	62	9	US-10-467-657-8308	Sequence 8308, Ap	327	29	59.2	437	9	US-10-152-170-466	Sequence 466, App
255	29	59.2	62	9	US-10-475-075-891	Sequence 891, App	328	29	59.2	437	11	US-11-290-153-466	Sequence 466, App
256	29	59.2	104	11	US-11-096-568A-22620	Sequence 22620, A	329	29	59.2	438	11	US-11-188-296-3025	Sequence 3025, Ap
257	29	59.2	105	9	US-10-530-253-27	Sequence 27, Appl1	330	29	59.2	441	11	US-11-087-099-7897	Sequence 7897, Ap
258	29	59.2	105	9	US-10-530-253-35	Sequence 35, Appl1	331	29	59.2	441	11	US-11-188-298-6457	Sequence 6457, Ap
259	29	59.2	106	9	US-10-530-253-32	Sequence 32, Appl1	332	29	59.2	443	9	US-10-513-639-19	Sequence 19, Appl1
260	29	59.2	109	11	US-11-096-568A-13268	Sequence 13268, A	333	29	59.2	447	11	US-11-232-805-8	Sequence 8, Appl1
261	29	59.2	118	9	US-10-644-807-355	Sequence 355, App	334	29	59.2	450	11	US-11-232-805-7	Sequence 7, Appl1
262	29	59.2	120	9	US-10-644-807-433	Sequence 433, App	335	29	59.2	450	11	US-10-455-772-760	Sequence 760, App
263	29	59.2	126	11	US-11-096-568A-10762	Sequence 3372, Ap	336	29	59.2	457	9	US-10-455-772-764	Sequence 764, App
264	29	59.2	138	11	US-11-072-512-3372	Sequence 2000, Ap	337	29	59.2	457	9	US-10-455-772-766	Sequence 766, App
265	29	59.2	147	9	US-10-467-657-2000	Sequence 5624, Ap	338	29	59.2	457	9	US-10-455-772-768	Sequence 768, App
266	29	59.2	162	9	US-10-467-657-5624	Sequence 55, Appl1	339	29	59.2	457	9	US-10-455-772-776	Sequence 770, App
267	29	59.2	176	9	US-10-880-881-55	Sequence 22040, A	340	29	59.2	474	11	US-11-188-298-667	Sequence 667, App
268	29	59.2	181	11	US-11-096-568A-22040	Sequence 22039, A	341	29	59.2	474	11	US-11-188-298-5955	Sequence 5955, Ap
269	29	59.2	193	11	US-11-096-568A-22039	Sequence 22610, A	342	29	59.2	474	11	US-11-188-298-14126	Sequence 14126, A
270	29	59.2	194	11	US-11-096-568A-22618	Sequence 5497, Ap	343	29	59.2	474	11	US-11-188-298-22242	Sequence 22242, A
271	29	59.2	213	11	US-11-096-568A-5497	Sequence 381, App	344	29	59.2	488	11	US-11-096-568A-25370	Sequence 25370, A
272	29	59.2	215	11	US-11-124-367A-381	Sequence 383, App	345	29	59.2	497	9	US-10-918-857-8	Sequence 8, Appl1
273	29	59.2	215	11	US-11-124-367A-383	Sequence 256, App	346	29	59.2	497	9	US-10-453-372-196	Sequence 466, App
274	29	59.2	217	9	US-10-644-807-356	Sequence 31377, A	347	29	59.2	500	9	US-10-453-372-492	Sequence 492, App
275	29	59.2	218	11	US-11-096-568A-31371	Sequence 16486, A	348	29	59.2	500	9	US-10-453-372-502	Sequence 502, App
276	29	59.2	228	11	US-11-096-568A-16486	Sequence 56, Appl1	349	29	59.2	500	9	US-10-453-372-504	Sequence 504, App
277	29	59.2	233	11	US-11-232-805-56	Sequence 10552, A	350	29	59.2	500	9	US-10-453-372-504	Sequence 84, Appl1
278	29	59.2	244	11	US-11-096-568A-10552	Sequence 59, Appl1	351	29	59.2	500	9	US-10-063-703-84	Sequence 180, App
279	29	59.2	246	9	US-10-880-881-59	Sequence 6014, Ap	352	29	59.2	500	9	US-10-218-184-180	Sequence 180, App
280	29	59.2	255	11	US-11-087-099-6014	Sequence 11421, A	353	29	59.2	500	9	US-10-219-061-180	Sequence 180, App
281	29	59.2	259	11	US-11-098-686-11441	Sequence 11485, A	354	29	59.2	500	9	US-10-219-062-180	Sequence 180, App
282	29	59.2	264	11	US-11-096-568A-16485	Sequence 10551, A	355	29	59.2	500	9	US-10-219-064-180	Sequence 180, App
283	29	59.2	268	11	US-11-096-568A-10551	Sequence 10551, A	356	29	59.2	500	11	US-10-233-134-180	Sequence 84, Appl1
284	29	59.2	270	9	US-10-506-454-658	Sequence 658, App	357	29	59.2	500	11	US-11-103-195-84	Sequence 84, Appl1
285	29	59.2	270	11	US-11-096-568A-22038	Sequence 22038, A	358	29	59.2	506	11	US-11-103-195-84	Sequence 12510, A
286	29	59.2	275	11	US-11-188-298-4830	Sequence 4830, Ap	359	29	59.2	506	11	US-11-188-298-11793	Sequence 11793, A
287	29	59.2	281	8	US-10-511-937-2552	Sequence 2552, Ap	360	29	59.2	513	9	US-10-878-556A-112	Sequence 112, App
288	29	59.2	282	11	US-11-096-568A-5496	Sequence 5496, Ap	361	29	59.2	519	11	US-11-188-298-12360	Sequence 2360, A
289	29	59.2	284	11	US-11-124-367A-382	Sequence 382, App	362	29	59.2	520	11	US-11-188-298-12760	Sequence 12760, A
290	29	59.2	284	11	US-11-087-099-10570	Sequence 10570, A	363	29	59.2	520	11	US-11-188-298-21432	Sequence 21432, A
291	29	59.2	286	9	US-10-880-881-57	Sequence 57, Appl1	364	29	59.2	541	11	US-11-079-463-6052	Sequence 6052, Ap
292	29	59.2	288	11	US-11-096-568A-31370	Sequence 31370, A	365	29	59.2	576	9	US-10-922-166-2	Sequence 2, Appl1
293	29	59.2	288	11	US-11-098-686-11375	Sequence 11375, A	366	29	59.2	584	11	US-11-087-099-5872	Sequence 5872, Ap
294	29	59.2	296	11	US-11-096-568A-5495	Sequence 5495, Ap	367	29	59.2	588	11	US-11-087-099-14702	Sequence 14702, A
295	29	59.2	305	11	US-11-098-686-10980	Sequence 10980, A	368	29	59.2	589	11	US-11-188-298-11139	Sequence 11139, A
296	29	59.2	323	11	US-11-087-099-12042	Sequence 12042, A	369	29	59.2	592	11	US-10-770-726-71	Sequence 71, Appl1
297	29	59.2	335	11	US-11-096-568A-18414	Sequence 18414, A	370	29	59.2	592	11	US-11-188-298-422	Sequence 422, App
298	29	59.2	337	11	US-11-096-568A-18413	Sequence 18413, A	371	29	59.2	599	11	US-10-506-454-829	Sequence 829, App
299	29	59.2	361	11	US-11-082-389-54	Sequence 64, Appl1	372	29	59.2	599	11	US-11-188-298-13779	Sequence 13779, A
300	29	59.2	368	11	US-11-045-004-702	Sequence 702, App	373	29	59.2	665	11	US-11-072-312-3377	Sequence 3377, Ap
301	29	59.2	372	11	US-11-087-099-1129	Sequence 1129, Ap	374	29	59.2	680	9	US-10-915-002-190	Sequence 190, App
302	29	59.2	373	9	US-10-880-881-61	Sequence 61, Appl1	375	29	59.2	686	9	US-10-821-234-1027	Sequence 1027, Ap
303	29	59.2	374	11	US-11-098-686-10584	Sequence 10584, A	376	29	59.2	696	11	US-11-080-991-46	Sequence 46, Appl1
304	29	59.2	375	11	US-11-188-298-15500	Sequence 15500, A	377	29	59.2	708	9	US-10-131-826A-298	Sequence 298, App
305	29	59.2	378	11	US-11-096-568A-18412	Sequence 18412, A	378	29	59.2	708	9	US-10-973-115B-298	Sequence 298, App
306	29	59.2	381	11	US-11-096-568A-16484	Sequence 16484, A	379	29	59.2	708	9	US-10-137-873A-298	Sequence 298, App
307	29	59.2	389	11	US-11-087-059-7245	Sequence 7245, Ap	380	29	59.2	708	9	US-10-152-370-298	Sequence 298, App
308	29	59.2	392	11	US-11-188-298-7928	Sequence 7928, Ap	381	29	59.2	718	9	US-11-290-153-298	Sequence 298, App
309	29	59.2	395	11	US-11-188-298-3827	Sequence 3827, Ap	382	29	59.2	779	11	US-10-918-857-2	Sequence 2, Appl1
310	29	59.2	413	11	US-11-096-568A-25371	Sequence 25371, A	383	29	59.2	779	11	US-11-186-184-151	Sequence 151, App
311	29	59.2	425	11	US-10-918-857-4	Sequence 4, Appl1	384	29	59.2	790	9	US-10-918-857-6	Sequence 6, Appl1
312	29	59.2	425	11	US-11-096-568A-29919	Sequence 29919, A	385	29	59.2	836	9	US-10-922-166-10	Sequence 20, Appl1
313	29	59.2	428	9	US-10-632-150-6	Sequence 6, Appl1	386	29	59.2	836	9	US-10-921-793-84	Sequence 84, Appl1

387	29	59.2	836	9	US-10-931-198-84	Sequence 84, Appl	460	28	57.1	236	11	US-11-079-463-5430	Sequence 5430, Ap
388	29	59.2	836	9	US-10-942-042-84	Sequence 84, Appl	461	28	57.1	240	11	US-11-087-099-8178	Sequence 8178, Ap
389	29	59.2	836	11	US-11-186-284-149	Sequence 149, Appl	462	28	57.1	244	9	US-10-467-657-2638	Sequence 2638, Ap
390	29	59.2	836	11	US-11-183-261-53	Sequence 53, Appl	463	28	57.1	246	11	US-11-054-515-1847	Sequence 1847, Ap
391	29	59.2	845	9	US-10-725-475-18	Sequence 18, Appl	464	28	57.1	249	11	US-11-266-444-1847	Sequence 1847, Ap
392	29	59.2	900	11	US-11-144-987-4	Sequence 4, Appl	465	28	57.1	249	11	US-11-054-515-2002	Sequence 2002, Ap
393	29	59.2	900	11	US-11-144-987-10	Sequence 10, Appl	466	28	57.1	249	11	US-11-266-444-2002	Sequence 2002, Ap
394	29	59.2	900	11	US-11-205-935-4	Sequence 4, Appl	467	28	57.1	250	11	US-11-054-515-1990	Sequence 1990, Ap
395	29	59.2	900	11	US-11-205-935-10	Sequence 10, Appl	468	28	57.1	250	11	US-11-266-444-1990	Sequence 1990, Ap
396	29	59.2	902	11	US-11-144-987-6	Sequence 6, Appl	469	28	57.1	251	11	US-11-054-515-1546	Sequence 1546, Ap
397	29	59.2	902	11	US-11-144-987-8	Sequence 8, Appl	470	28	57.1	251	11	US-11-266-444-1546	Sequence 1546, Ap
398	29	59.2	902	11	US-11-144-987-12	Sequence 12, Appl	471	28	57.1	254	11	US-11-054-515-1966	Sequence 1966, Ap
399	29	59.2	902	11	US-11-144-987-14	Sequence 14, Appl	472	28	57.1	254	11	US-11-266-444-1966	Sequence 1966, Ap
400	29	59.2	902	11	US-11-205-935-6	Sequence 6, Appl	473	28	57.1	255	11	US-11-054-515-1597	Sequence 1597, Ap
401	29	59.2	902	11	US-11-205-935-8	Sequence 8, Appl	474	28	57.1	255	11	US-11-266-444-1597	Sequence 1597, Ap
402	29	59.2	902	11	US-11-205-935-12	Sequence 12, Appl	475	28	57.1	256	11	US-11-096-568A-33243	Sequence 33243, A
403	29	59.2	902	11	US-11-205-935-14	Sequence 14, Appl	476	28	57.1	263	11	US-11-096-568A-17277	Sequence 17277, A
404	29	59.2	910	11	US-11-144-987-2	Sequence 2, Appl	477	28	57.1	265	11	US-11-096-568A-24007	Sequence 24007, A
405	29	59.2	910	11	US-11-205-935-2	Sequence 2, Appl	478	28	57.1	273	11	US-11-096-568A-11741	Sequence 11741, A
406	29	59.2	1140	9	US-10-055-877-215	Sequence 215, Appl	479	28	57.1	274	11	US-11-087-099-258	Sequence 258, Appl
407	29	59.2	1184	11	US-11-096-568A-2858	Sequence 2858, A	480	28	57.1	284	11	US-11-096-568A-11740	Sequence 11740, A
408	29	59.2	1192	9	US-10-204-639-67	Sequence 67, Appl	481	28	57.1	284	11	US-11-188-298-1033	Sequence 1033, Ap
409	29	59.2	1199	9	US-10-922-166-15	Sequence 15, Appl	482	28	57.1	285	11	US-11-087-099-3152	Sequence 3152, Ap
410	29	59.2	1230	11	US-11-087-099-1702	Sequence 1702, Ap	483	28	57.1	288	11	US-11-087-099-4937	Sequence 4937, Ap
411	29	59.2	1230	11	US-11-087-099-892	Sequence 892, Ap	484	28	57.1	291	11	US-11-045-004-2539	Sequence 2539, Ap
412	29	59.2	1230	11	US-11-188-298-1685	Sequence 1685, Ap	485	28	57.1	291	11	US-11-188-298-974	Sequence 974, Appl
413	29	59.2	1230	11	US-11-188-298-8275	Sequence 8275, Ap	486	28	57.1	302	11	US-11-096-568A-24006	Sequence 24006, A
414	29	59.2	1676	11	US-11-058-134A-102	Sequence 102, Appl	487	28	57.1	318	11	US-11-264-096-203	Sequence 203, Appl
415	29	59.2	1717	11	US-11-182-016-20	Sequence 20, Appl	488	28	57.1	319	11	US-11-188-298-4401	Sequence 4401, Ap
416	29	59.2	1744	11	US-11-182-016-22	Sequence 22, Appl	489	28	57.1	327	11	US-11-188-298-12413	Sequence 12413, A
417	29	59.2	2760	11	US-11-124-367A-444	Sequence 444, Appl	490	28	57.1	329	11	US-11-045-004-2708	Sequence 2708, Ap
418	29	59.2	2803	11	US-11-124-367A-442	Sequence 442, Appl	491	28	57.1	339	9	US-10-509-773-6	Sequence 6, Appl
419	29	59.2	2803	11	US-11-124-367A-445	Sequence 445, Appl	492	28	57.1	342	11	US-11-087-099-3537	Sequence 3537, Ap
420	29	59.2	2984	11	US-11-124-367A-443	Sequence 443, Appl	493	28	57.1	351	11	US-11-188-298-17025	Sequence 17025, A
421	29	59.2	3027	11	US-11-124-367A-441	Sequence 441, Appl	494	28	57.1	352	11	US-11-087-099-10353	Sequence 10353, A
422	28.5	58.2	231	11	US-11-050-857-254	Sequence 254, Appl	495	28	57.1	352	11	US-11-188-298-4743	Sequence 4743, Ap
423	28.5	58.2	485	11	US-11-050-857-1135	Sequence 1135, Ap	496	28	57.1	357	11	US-11-045-004-1742	Sequence 1742, Ap
424	28.5	58.2	649	11	US-11-050-857-990	Sequence 990, Appl	497	28	57.1	358	11	US-11-096-568A-15105	Sequence 15105, A
425	28.5	58.2	770	11	US-11-050-857-252	Sequence 252, Appl	498	28	57.1	359	9	US-10-821-234-1396	Sequence 1396, Ap
426	28.5	58.2	836	11	US-11-050-857-988	Sequence 988, Appl	499	28	57.1	359	9	US-10-784-004-738	Sequence 738, Appl
427	28.5	58.2	836	11	US-11-050-857-989	Sequence 989, Appl	500	28	57.1	359	11	US-11-096-568A-20370	Sequence 20370, A
428	28	57.1	30	11	US-11-004-590-114	Sequence 114, Appl	501	28	57.1	359	11	US-11-188-298-8001	Sequence 8001, Ap
429	28	57.1	98	11	US-11-144-248-34	Sequence 34, Appl	502	28	57.1	360	11	US-11-087-099-12207	Sequence 12207, A
430	28	57.1	98	11	US-11-054-669-34	Sequence 34, Appl	503	28	57.1	362	11	US-11-096-568A-11739	Sequence 11739, A
431	28	57.1	98	11	US-11-144-222-34	Sequence 34, Appl	504	28	57.1	362	11	US-11-188-298-18895	Sequence 18895, A
432	28	57.1	98	11	US-11-004-590-39	Sequence 39, Appl	505	28	57.1	365	11	US-11-188-298-2445	Sequence 2445, Ap
433	28	57.1	98	11	US-11-182-343-34	Sequence 34, Appl	506	28	57.1	365	11	US-11-188-298-296	Sequence 296, Ap
434	28	57.1	112	11	US-11-087-099-5048	Sequence 5048, Ap	507	28	57.1	368	11	US-11-188-298-13812	Sequence 13812, A
435	28	57.1	116	9	US-10-475-075-305	Sequence 305, Appl	508	28	57.1	368	11	US-11-188-298-18698	Sequence 18698, A
436	28	57.1	116	9	US-10-475-075-546	Sequence 546, Appl	509	28	57.1	369	11	US-11-188-298-714	Sequence 714, Appl
437	28	57.1	116	9	US-10-947-071-8	Sequence 8, Appl	510	28	57.1	369	11	US-11-188-298-5459	Sequence 5459, Ap
438	28	57.1	116	9	US-10-947-071-9	Sequence 9, Appl	511	28	57.1	369	11	US-11-188-298-10432	Sequence 10432, Ap
439	28	57.1	116	9	US-10-947-071-10	Sequence 10, Appl	512	28	57.1	369	11	US-11-188-298-16415	Sequence 16415, A
440	28	57.1	116	9	US-10-947-071-90	Sequence 90, Appl	513	28	57.1	369	11	US-11-188-298-16484	Sequence 16484, A
441	28	57.1	116	9	US-10-948-097-8	Sequence 8, Appl	514	28	57.1	369	11	US-11-188-298-19492	Sequence 19492, A
442	28	57.1	116	9	US-10-948-097-9	Sequence 9, Appl	515	28	57.1	370	11	US-11-188-298-19804	Sequence 19804, A
443	28	57.1	116	9	US-10-948-097-10	Sequence 10, Appl	516	28	57.1	370	11	US-11-096-568A-23242	Sequence 23242, A
444	28	57.1	116	9	US-10-948-097-90	Sequence 90, Appl	517	28	57.1	370	11	US-11-188-298-33307	Sequence 33307, A
445	28	57.1	124	10	US-11-254-182-20	Sequence 20, Appl	518	28	57.1	370	11	US-11-188-298-8995	Sequence 8995, Ap
446	28	57.1	124	11	US-11-182-908-20	Sequence 20, Appl	519	28	57.1	370	11	US-11-188-298-9711	Sequence 9711, Ap
447	28	57.1	111	9	US-10-506-454-1210	Sequence 1210, Ap	520	28	57.1	370	11	US-11-188-298-17120	Sequence 17120, A
448	28	57.1	148	11	US-11-087-099-5839	Sequence 5839, Ap	521	28	57.1	370	11	US-11-188-298-20348	Sequence 20348, A
449	28	57.1	169	11	US-11-072-512-3827	Sequence 3827, Ap	522	28	57.1	370	11	US-11-188-298-20374	Sequence 20374, A
450	28	57.1	180	11	US-11-182-298-15831	Sequence 15831, A	523	28	57.1	371	11	US-11-096-568A-24782	Sequence 24782, A
451	28	57.1	183	11	US-11-188-298-13647	Sequence 13647, A	524	28	57.1	371	11	US-11-188-298-498	Sequence 498, Appl
452	28	57.1	183	11	US-11-188-298-18098	Sequence 18098, A	525	28	57.1	371	11	US-11-096-568A-15104	Sequence 15104, A
453	28	57.1	186	11	US-11-188-298-21678	Sequence 21678, A	526	28	57.1	372	11	US-11-188-298-4185	Sequence 4185, Ap
454	28	57.1	199	11	US-11-096-568A-14298	Sequence 14298, A	527	28	57.1	372	11	US-11-188-298-5199	Sequence 5199, Ap
455	28	57.1	213	11	US-11-072-512-3861	Sequence 3861, Ap	528	28	57.1	372	11	US-11-188-298-15776	Sequence 15776, A
456	28	57.1	214	11	US-11-098-686-10832	Sequence 10832, A	529	28	57.1	372	11	US-11-188-298-16095	Sequence 16095, A
457	28	57.1	228	11	US-11-188-298-22426	Sequence 22426, A	530	28	57.1	373	11	US-11-188-298-6075	Sequence 6075, Ap
458	28	57.1	236	11	US-11-096-568A-23308	Sequence 23308, A	531	28	57.1	374	11	US-11-188-298-22482	Sequence 22482, A
459	28	57.1	236	11	US-11-096-568A-24783	Sequence 24783, A	532	28	57.1	374	11		

533	28	57.1	375	11	US-11-188-298-358	Sequence 358, App	606	28	57.1	463	11	US-11-096-568A-31769	Sequence 31769, A
534	28	57.1	375	11	US-11-188-298-5862	Sequence 5862, App	607	28	57.1	470	11	US-11-096-568A-31768	Sequence 31768, A
535	28	57.1	376	11	US-11-188-298-5714	Sequence 5714, App	608	28	57.1	471	11	US-11-188-298-21555	Sequence 21555, A
536	28	57.1	376	11	US-11-188-298-16875	Sequence 16875, A	609	28	57.1	473	11	US-11-188-298-1923	Sequence 1923, App
537	28	57.1	376	11	US-11-188-298-21069	Sequence 21069, A	610	28	57.1	477	11	US-11-188-298-1869	Sequence 1869, App
538	28	57.1	376	11	US-11-188-298-21556	Sequence 21556, A	611	28	57.1	477	11	US-11-188-298-15076	Sequence 15076, App
539	28	57.1	377	11	US-11-096-568A-21576	Sequence 21576, A	612	28	57.1	484	11	US-11-188-298-2158	Sequence 2158, App
540	28	57.1	377	11	US-11-096-568A-23241	Sequence 23241, A	613	28	57.1	484	11	US-11-188-298-3928	Sequence 3928, App
541	28	57.1	377	11	US-11-188-298-819	Sequence 819, App	614	28	57.1	486	11	US-11-079-463-6735	Sequence 6735, App
542	28	57.1	378	11	US-11-096-568A-24781	Sequence 24781, A	615	28	57.1	492	9	US-10-467-657-6158	Sequence 6158, App
543	28	57.1	378	11	US-11-188-298-12308	Sequence 12308, A	616	28	57.1	499	11	US-11-188-298-21676	Sequence 21676, A
544	28	57.1	379	11	US-11-188-298-6334	Sequence 6334, App	617	28	57.1	494	9	US-10-934-944-236	Sequence 236, App
545	28	57.1	381	11	US-11-188-298-1191	Sequence 1191, App	618	28	57.1	494	11	US-11-116-881A-245	Sequence 245, App
546	28	57.1	383	11	US-11-079-463-5452	Sequence 5452, App	619	28	57.1	496	11	US-11-172-740-576	Sequence 576, App
547	28	57.1	384	11	US-11-188-298-8063	Sequence 8063, App	620	28	57.1	496	11	US-11-188-298-8567	Sequence 8567, App
548	28	57.1	385	11	US-11-188-298-14192	Sequence 14192, A	621	28	57.1	501	11	US-11-094-917-36	Sequence 36, App1
549	28	57.1	387	11	US-11-188-298-686	Sequence 686, App	622	28	57.1	506	11	US-11-188-298-1959	Sequence 1959, A
550	28	57.1	387	11	US-11-188-298-14095	Sequence 14095, A	623	28	57.1	506	11	US-11-188-298-13842	Sequence 13842, A
551	28	57.1	389	11	US-11-188-298-2989	Sequence 2989, App	624	28	57.1	514	11	US-11-264-096-2221	Sequence 2221, App
552	28	57.1	391	11	US-11-188-298-4820	Sequence 4820, App	625	28	57.1	514	11	US-10-915-002-240	Sequence 240, App
553	28	57.1	391	11	US-11-188-298-11034	Sequence 11034, A	626	28	57.1	515	9	US-10-915-002-240	Sequence 240, App
554	28	57.1	393	11	US-11-188-298-14811	Sequence 14811, A	627	28	57.1	515	11	US-11-096-568A-27469	Sequence 27469, A
555	28	57.1	393	11	US-11-188-298-21337	Sequence 21337, A	628	28	57.1	517	9	US-10-641-678-47	Sequence 47, App1
556	28	57.1	393	11	US-11-188-298-21713	Sequence 21713, A	629	28	57.1	518	11	US-11-226-701-13	Sequence 13, App1
557	28	57.1	394	11	US-11-188-298-7336	Sequence 7336, App	630	28	57.1	519	11	US-11-188-298-13999	Sequence 13999, A
558	28	57.1	394	11	US-11-188-298-13803	Sequence 13803, A	631	28	57.1	525	11	US-11-102-120-13	Sequence 13, App1
559	28	57.1	394	11	US-11-188-298-20910	Sequence 20910, A	632	28	57.1	567	11	US-11-188-298-9207	Sequence 9207, App
560	28	57.1	394	11	US-11-188-298-21915	Sequence 21915, A	633	28	57.1	567	11	US-11-188-298-4169	Sequence 4169, App
561	28	57.1	395	11	US-11-188-298-311	Sequence 311, App	634	28	57.1	571	11	US-11-072-512-2414	Sequence 2414, App
562	28	57.1	396	11	US-11-188-298-936	Sequence 936, App	635	28	57.1	579	9	US-10-501-035-317	Sequence 317, App
563	28	57.1	396	11	US-11-188-298-11276	Sequence 11276, A	636	28	57.1	579	11	US-11-261-346-2	Sequence 2, App1
564	28	57.1	396	11	US-11-188-298-19598	Sequence 19598, A	637	28	57.1	585	11	US-11-087-099-10894	Sequence 10894, A
565	28	57.1	397	11	US-11-188-298-12115	Sequence 12115, A	638	28	57.1	594	11	US-11-096-568A-20369	Sequence 20369, A
566	28	57.1	397	11	US-11-188-298-14492	Sequence 14492, A	639	28	57.1	626	11	US-11-188-298-22376	Sequence 22376, A
567	28	57.1	397	11	US-11-188-298-17862	Sequence 17862, A	640	28	57.1	632	11	US-11-188-298-978	Sequence 978, App
568	28	57.1	397	11	US-11-188-298-18721	Sequence 18721, A	641	28	57.1	636	9	US-10-506-454-910	Sequence 910, App1
569	28	57.1	398	11	US-11-188-298-8314	Sequence 8314, App	642	28	57.1	645	11	US-11-154-337-13	Sequence 13, App1
570	28	57.1	398	11	US-11-188-298-8414	Sequence 8414, App	643	28	57.1	645	11	US-11-213-557-1	Sequence 1, App1
571	28	57.1	398	11	US-11-188-298-12853	Sequence 12853, A	644	28	57.1	645	11	US-11-222-587-13	Sequence 13, App1
572	28	57.1	399	11	US-11-188-298-5371	Sequence 5371, App	645	28	57.1	645	11	US-11-234-586-13	Sequence 13, App1
573	28	57.1	399	11	US-11-188-298-8512	Sequence 8512, App	646	28	57.1	645	11	US-11-234-586-13	Sequence 13, App1
574	28	57.1	399	11	US-11-188-298-9277	Sequence 9277, App	647	28	57.1	646	11	US-11-096-568A-27468	Sequence 27468, A
575	28	57.1	403	11	US-11-188-298-19471	Sequence 19471, A	648	28	57.1	646	11	US-11-096-568A-30447	Sequence 30447, A
576	28	57.1	404	11	US-11-188-298-19179	Sequence 19179, A	649	28	57.1	676	11	US-11-188-298-5921	Sequence 5921, App
577	28	57.1	406	11	US-11-188-298-13760	Sequence 13760, A	650	28	57.1	676	11	US-11-188-298-27820	Sequence 27820, A
578	28	57.1	407	11	US-11-087-099-2794	Sequence 2794, App	651	28	57.1	727	11	US-11-096-568A-2445	Sequence 2445, App
579	28	57.1	407	11	US-11-096-568A-29352	Sequence 29352, A	652	28	57.1	727	11	US-11-079-463-7101	Sequence 7101, App
580	28	57.1	407	11	US-11-188-298-5916	Sequence 5916, App	653	28	57.1	759	11	US-11-087-099-3039	Sequence 3039, App
581	28	57.1	410	11	US-11-188-298-19739	Sequence 19739, A	654	28	57.1	760	11	US-11-288-493-70	Sequence 70, App1
582	28	57.1	413	11	US-11-188-298-4687	Sequence 4687, App	655	28	57.1	808	11	US-11-096-568A-30446	Sequence 30446, A
583	28	57.1	413	11	US-11-188-298-9403	Sequence 9403, App	656	28	57.1	812	11	US-11-096-568A-30445	Sequence 30445, A
584	28	57.1	415	11	US-11-188-298-8268	Sequence 8268, App	657	28	57.1	818	11	US-11-096-568A-27820	Sequence 27820, A
585	28	57.1	416	11	US-11-188-298-9697	Sequence 9697, App	658	28	57.1	825	11	US-11-096-568A-27819	Sequence 27819, A
586	28	57.1	416	11	US-11-188-298-19589	Sequence 19589, A	659	28	57.1	826	11	US-11-096-568A-27818	Sequence 27818, A
587	28	57.1	417	11	US-11-188-298-1955	Sequence 1955, App	660	28	57.1	830	11	US-11-096-568A-27818	Sequence 27818, A
588	28	57.1	417	11	US-11-188-298-2525	Sequence 2525, App	661	28	57.1	836	11	US-11-096-568A-2444	Sequence 2444, App
589	28	57.1	418	9	US-10-793-626-1288	Sequence 1288, App	662	28	57.1	869	11	US-11-113-751-2	Sequence 2, App1
590	28	57.1	418	11	US-11-188-298-18998	Sequence 18998, A	663	28	57.1	896	11	US-11-080-991-98	Sequence 98, App1
591	28	57.1	418	11	US-11-188-298-21648	Sequence 21648, A	664	28	57.1	1062	11	US-11-188-298-7278	Sequence 7278, App
592	28	57.1	419	11	US-11-113-202-2	Sequence 2, App1	665	28	57.1	1081	11	US-11-113-751-38	Sequence 38, App1
593	28	57.1	419	11	US-11-113-202-4	Sequence 4, App1	666	28	57.1	1083	11	US-11-113-751-40	Sequence 40, App1
594	28	57.1	419	11	US-11-113-202-23	Sequence 23, App1	667	28	57.1	1104	11	US-11-072-512-2506	Sequence 2506, App
595	28	57.1	422	11	US-11-188-298-1399	Sequence 1399, App	668	28	57.1	1110	11	US-11-113-751-14	Sequence 14, App1
596	28	57.1	423	11	US-11-188-298-15694	Sequence 15694, A	669	28	57.1	1115	11	US-11-113-751-1	Sequence 1, App1
597	28	57.1	426	9	US-10-467-657-2120	Sequence 2120, App	670	28	57.1	1116	11	US-11-113-751-34	Sequence 34, App1
598	28	57.1	428	11	US-11-188-298-10159	Sequence 10159, App	671	28	57.1	1116	11	US-11-113-751-42	Sequence 42, App1
599	28	57.1	431	11	US-11-043-004-2639	Sequence 2639, App	672	28	57.1	1118	11	US-11-113-751-19	Sequence 19, App1
600	28	57.1	436	11	US-11-188-298-16711	Sequence 16711, A	673	28	57.1	1121	11	US-11-113-751-24	Sequence 24, App1
601	28	57.1	437	11	US-11-096-568A-29351	Sequence 29351, A	674	28	57.1	1121	11	US-11-087-099-6723	Sequence 6723, App
602	28	57.1	437	11	US-11-096-568A-31770	Sequence 31770, A	675	28	57.1	1130	11	US-11-113-751-36	Sequence 36, App1
603	28	57.1	443	9	US-11-087-099-7043	Sequence 7043, App	676	28	57.1	1151	11	US-11-113-751-44	Sequence 44, App1
604	28	57.1	455	11	US-10-467-657-5628	Sequence 5628, App	677	28	57.1	1153	11	US-11-113-751-27	Sequence 27, App1
605	28	57.1	463	11	US-11-096-568A-29350	Sequence 29350, A	678	28	57.1	1159	11	US-11-113-751-27	Sequence 27, App1

679	28	57.1	1180	11	US-11-079-463-9464	Sequence 9464, Ap	752	27	55.1	197	11	US-11-087-099-5815	Sequence 5815, Ap
680	28	57.1	1255	9	US-10-770-726-62	Sequence 62, Appl	753	27	55.1	199	11	US-11-000-463-880	Sequence 880, App
681	28	57.1	1255	11	US-11-022-562-213	Sequence 213, App	754	27	55.1	201	11	US-11-203-251A-95	Sequence 95, Appl
682	28	57.1	1255	11	US-11-113-202-10	Sequence 10, Appl	755	27	55.1	202	11	US-11-087-099-10703	Sequence 10703, A
683	28	57.1	1255	11	US-11-033-039-553	Sequence 553, App	756	27	55.1	206	11	US-11-087-099-2337	Sequence 2337, Ap
684	28	57.1	1255	11	US-11-155-288-9	Sequence 9, Appl1	757	27	55.1	207	11	US-11-203-251A-96	Sequence 96, Appl
685	28	57.1	1255	11	US-11-202-516-4	Sequence 4, Appl1	758	27	55.1	208	11	US-11-096-568A-18590	Sequence 18590, A
686	28	57.1	1255	11	US-11-175-405-2	Sequence 2, Appl1	759	27	55.1	214	11	US-11-203-251A-97	Sequence 97, Appl
687	28	57.1	1258	11	US-11-033-039-930	Sequence 930, App	760	27	55.1	221	11	US-11-096-568A-24768	Sequence 24768, A
688	28	57.1	1239	9	US-10-506-454-509	Sequence 509, App	761	27	55.1	232	11	US-11-096-568A-26111	Sequence 26111, A
689	28	57.1	1343	9	US-10-541-814-2	Sequence 2, Appl1	762	27	55.1	231	11	US-11-096-568A-18589	Sequence 18589, A
690	28	57.1	1343	9	US-10-541-814-15	Sequence 15, Appl	763	27	55.1	236	9	US-10-496-284-58	Sequence 58, Appl
691	28	57.1	5179	11	US-11-108-172-1068	Sequence 1068, Ap	764	27	55.1	236	9	US-10-496-284-62	Sequence 62, Appl
692	28	57.1	7968	11	US-11-143-980-49	Sequence 49, Appl	765	27	55.1	236	11	US-11-087-099-1180	Sequence 1180, Ap
693	27.5	56.1	201	9	US-10-194-487-108	Sequence 108, App	766	27	55.1	236	11	US-11-087-099-2806	Sequence 2806, Ap
694	27.5	56.1	201	9	US-10-195-883-108	Sequence 108, App	767	27	55.1	238	9	US-10-496-284-15	Sequence 15, Appl
695	27.5	56.1	201	9	US-10-195-888-108	Sequence 108, App	768	27	55.1	238	9	US-10-496-284-19	Sequence 19, Appl
696	27.5	56.1	201	9	US-10-195-889-108	Sequence 108, App	769	27	55.1	239	9	US-10-496-284-11	Sequence 11, Appl
697	27.5	56.1	201	9	US-10-216-161A-477	Sequence 477, App	770	27	55.1	240	11	US-11-096-568A-24767	Sequence 24767, A
698	27.5	56.1	415	9	US-10-467-657-4884	Sequence 4884, App	771	27	55.1	244	9	US-10-454-437-238	Sequence 238, App
699	27.5	56.1	1783	11	US-11-126-313-38	Sequence 38, Appl	772	27	55.1	244	9	US-10-454-437-240	Sequence 240, App
700	27	55.1	35	11	US-11-019-027-29	Sequence 29, Appl	773	27	55.1	244	11	US-11-098-686-11086	Sequence 11086, A
701	27	55.1	46	11	US-11-004-399-3263	Sequence 3263, Ap	774	27	55.1	247	8	US-10-496-758-2	Sequence 2, Appl
702	27	55.1	61	9	US-10-467-657-8754	Sequence 8754, Ap	775	27	55.1	254	9	US-11-200-992-2	Sequence 2, Appl1
703	27	55.1	66	9	US-10-985-321A-24	Sequence 24, Appl	776	27	55.1	254	9	US-10-506-454-1374	Sequence 1374, Ap
704	27	55.1	71	11	US-11-096-568A-2438	Sequence 2438, Ap	777	27	55.1	255	11	US-11-096-568A-20833	Sequence 20833, A
705	27	55.1	74	11	US-11-079-463-10010	Sequence 10010, A	778	27	55.1	262	11	US-11-074-116-8	Sequence 8, Appl
706	27	55.1	76	11	US-11-004-399-2491	Sequence 2491, Ap	779	27	55.1	262	11	US-11-096-568A-26468	Sequence 26468, A
707	27	55.1	81	9	US-10-644-807-279	Sequence 279, App	780	27	55.1	263	11	US-11-087-099-9997	Sequence 9997, Ap
708	27	55.1	81	9	US-10-644-807-382	Sequence 382, App	781	27	55.1	263	11	US-11-087-099-11573	Sequence 11573, A
709	27	55.1	82	11	US-11-096-568A-2437	Sequence 2437, Ap	782	27	55.1	264	11	US-11-087-099-2661	Sequence 2661, Ap
710	27	55.1	82	11	US-11-096-568A-5084	Sequence 5084, Ap	783	27	55.1	264	11	US-11-087-099-3870	Sequence 3870, Ap
711	27	55.1	89	11	US-11-096-568A-2436	Sequence 2436, Ap	784	27	55.1	264	11	US-11-087-099-5973	Sequence 5973, Ap
712	27	55.1	104	11	US-11-087-099-11956	Sequence 11956, A	785	27	55.1	264	11	US-11-087-099-9886	Sequence 9886, Ap
713	27	55.1	107	7	US-09-995-493-152	Sequence 152, App	786	27	55.1	264	11	US-11-087-099-12360	Sequence 12360, A
714	27	55.1	111	11	US-11-087-099-6747	Sequence 6747, Ap	787	27	55.1	265	11	US-11-188-298-9289	Sequence 9289, Ap
715	27	55.1	116	9	US-10-793-626-1680	Sequence 1680, Ap	788	27	55.1	266	11	US-11-087-099-2659	Sequence 2659, Ap
716	27	55.1	119	11	US-11-264-096-1187	Sequence 1187, Ap	789	27	55.1	266	11	US-11-087-099-2780	Sequence 2780, Ap
717	27	55.1	122	11	US-11-072-512-3014	Sequence 3014, Ap	790	27	55.1	266	11	US-11-087-099-11501	Sequence 11501, A
718	27	55.1	128	11	US-11-087-099-6485	Sequence 6485, Ap	791	27	55.1	268	11	US-11-087-099-7864	Sequence 7864, Ap
719	27	55.1	128	11	US-11-144-947-321	Sequence 321, App	792	27	55.1	269	11	US-11-098-686-10335	Sequence 10335, A
720	27	55.1	129	11	US-11-087-099-3555	Sequence 3555, Ap	793	27	55.1	280	11	US-11-079-463-8374	Sequence 8374, Ap
721	27	55.1	130	11	US-11-087-099-5384	Sequence 5384, Ap	794	27	55.1	282	11	US-11-079-463-5971	Sequence 5971, Ap
722	27	55.1	132	11	US-11-087-099-5038	Sequence 5038, Ap	795	27	55.1	283	11	US-11-079-463-8546	Sequence 8546, Ap
723	27	55.1	133	11	US-11-087-099-1502	Sequence 1502, Ap	796	27	55.1	287	11	US-11-096-568A-12643	Sequence 12643, A
724	27	55.1	135	11	US-11-096-568A-16878	Sequence 16878, A	797	27	55.1	290	11	US-11-172-740-1637	Sequence 1637, Ap
725	27	55.1	139	11	US-11-096-568A-13407	Sequence 13407, A	798	27	55.1	290	11	US-11-188-298-18959	Sequence 18959, A
726	27	55.1	139	11	US-11-045-004-960	Sequence 960, App	799	27	55.1	292	9	US-10-967-527A-19	Sequence 19, Appl
727	27	55.1	141	11	US-11-096-568A-16877	Sequence 16877, A	800	27	55.1	293	9	US-10-742-634-7	Sequence 7, Appl1
728	27	55.1	142	9	US-10-467-657-1056	Sequence 1056, Ap	801	27	55.1	293	11	US-11-221-849-2	Sequence 2, Appl1
729	27	55.1	142	11	US-11-170-453-7	Sequence 7, Appl1	802	27	55.1	293	11	US-11-242-294-2	Sequence 2, Appl1
730	27	55.1	146	9	US-10-511-538-93	Sequence 93, Appl	803	27	55.1	293	11	US-11-200-992-6	Sequence 6, Appl1
731	27	55.1	146	9	US-10-194-487-376	Sequence 376, App	804	27	55.1	293	11	US-11-069-473-2	Sequence 2, Appl1
732	27	55.1	146	9	US-10-195-883-376	Sequence 376, App	805	27	55.1	295	11	US-11-079-463-6257	Sequence 6257, Ap
733	27	55.1	146	9	US-10-195-888-376	Sequence 376, App	806	27	55.1	296	9	US-10-506-454-116	Sequence 116, App
734	27	55.1	146	9	US-10-195-889-376	Sequence 376, App	807	27	55.1	304	11	US-11-079-463-9907	Sequence 9907, Ap
735	27	55.1	147	11	US-11-087-099-11980	Sequence 11980, A	808	27	55.1	308	11	US-10-793-626-1732	Sequence 1732, Ap
736	27	55.1	149	11	US-11-045-004-278	Sequence 278, App	809	27	55.1	309	11	US-11-188-298-14567	Sequence 14567, A
737	27	55.1	150	11	US-11-096-568A-24991	Sequence 24991, A	810	27	55.1	310	9	US-10-131-826A-538	Sequence 538, App
738	27	55.1	157	9	US-10-506-454-1586	Sequence 1586, Ap	811	27	55.1	310	9	US-10-973-115B-538	Sequence 538, App
739	27	55.1	167	11	US-11-087-099-4111	Sequence 4111, Ap	812	27	55.1	310	9	US-10-213-535-20	Sequence 20, Appl
740	27	55.1	168	11	US-11-096-568A-11304	Sequence 11304, A	813	27	55.1	310	9	US-10-536-366-3	Sequence 3, Appl1
741	27	55.1	173	11	US-11-018-868-6	Sequence 6, Appl1	814	27	55.1	310	9	US-10-137-873A-538	Sequence 538, App
742	27	55.1	173	11	US-11-018-868-46	Sequence 46, Appl1	815	27	55.1	310	9	US-10-152-370-558	Sequence 538, App
743	27	55.1	174	11	US-11-087-099-7080	Sequence 7080, Ap	816	27	55.1	310	11	US-11-025-834A-15	Sequence 15, Appl
744	27	55.1	176	11	US-11-087-099-24990	Sequence 24990, A	817	27	55.1	310	11	US-11-290-153-538	Sequence 538, App
745	27	55.1	177	11	US-11-072-512-3347	Sequence 3347, Ap	818	27	55.1	310	11	US-11-264-096-2045	Sequence 2045, Ap
746	27	55.1	180	9	US-10-506-454-689	Sequence 689, App	819	27	55.1	310	11	US-11-264-096-2046	Sequence 2046, Ap
747	27	55.1	182	9	US-10-821-234-1114	Sequence 1114, App	820	27	55.1	310	11	US-11-264-096-2047	Sequence 2047, Ap
748	27	55.1	182	11	US-11-096-568A-24989	Sequence 24989, A	821	27	55.1	311	11	US-11-096-568A-12642	Sequence 12642, A
749	27	55.1	184	11	US-11-087-099-5273	Sequence 5273, Ap	822	27	55.1	314	11	US-11-188-298-1025	Sequence 1025, Ap
750	27	55.1	194	11	US-11-079-463-7502	Sequence 7502, Ap	823	27	55.1	315	11	US-11-096-568A-10406	Sequence 10406, A
751	27	55.1	195	11	US-11-087-099-6517	Sequence 6517, Ap	824	27	55.1	321	11	US-11-188-298-8214	Sequence 8214, Ap

825	27	55.1	325	11	US-11-143-980-45	Sequence 45, Appl	898	27	55.1	372	11	US-11-188-298-5057	Sequence 5057, Ap
826	27	55.1	326	11	US-11-096-568A-20832	Sequence 20832, A	899	27	55.1	375	11	US-11-188-298-6691	Sequence 6691, Ap
827	27	55.1	326	11	US-11-188-298-15268	Sequence 15268, A	900	27	55.1	375	11	US-11-188-298-7772	Sequence 7772, Ap
828	27	55.1	328	11	US-11-096-568A-18588	Sequence 18588, A	901	27	55.1	376	11	US-11-188-298-2021	Sequence 2021, Ap
829	27	55.1	331	8	US-10-511-455-31	Sequence 31, Appl	902	27	55.1	376	11	US-11-188-298-2629	Sequence 2629, Ap
830	27	55.1	338	11	US-11-079-463-9587	Sequence 9587, Ap	903	27	55.1	377	11	US-11-188-298-5457	Sequence 5457, Ap
831	27	55.1	339	11	US-11-188-298-8532	Sequence 8532, Ap	904	27	55.1	379	11	US-11-188-298-2442	Sequence 2442, Ap
832	27	55.1	339	11	US-11-188-298-12262	Sequence 12262, A	905	27	55.1	379	11	US-11-188-298-20791	Sequence 20791, A
833	27	55.1	340	11	US-11-092-353-1	Sequence 1, Appl1	906	27	55.1	380	11	US-11-188-298-10003	Sequence 19003, A
834	27	55.1	340	11	US-11-188-298-8484	Sequence 8484, Ap	907	27	55.1	381	7	US-09-978-360A-622	Sequence 622, App
835	27	55.1	340	11	US-11-188-298-10078	Sequence 10078, A	908	27	55.1	386	9	US-10-506-454-528	Sequence 528, App
836	27	55.1	340	11	US-11-188-298-13220	Sequence 13220, A	909	27	55.1	387	11	US-11-188-298-7557	Sequence 7557, Ap
837	27	55.1	340	11	US-11-188-298-20109	Sequence 20109, A	910	27	55.1	387	11	US-11-188-298-20881	Sequence 20881, A
838	27	55.1	349	11	US-11-188-298-3396	Sequence 3396, Ap	911	27	55.1	388	11	US-11-188-298-11099	Sequence 11099, A
839	27	55.1	350	11	US-11-045-004-1972	Sequence 1972, Ap	912	27	55.1	389	11	US-11-188-298-6659	Sequence 6659, Ap
840	27	55.1	351	11	US-11-087-099-11765	Sequence 11765, A	913	27	55.1	391	11	US-11-188-298-11103	Sequence 11103, A
841	27	55.1	352	11	US-11-188-298-9369	Sequence 9369, Ap	915	27	55.1	394	11	US-11-188-298-2671	Sequence 2671, Ap
842	27	55.1	352	11	US-11-188-298-14324	Sequence 14324, A	916	27	55.1	398	11	US-11-096-568A-27736	Sequence 27736, A
843	27	55.1	352	11	US-11-188-298-14587	Sequence 14587, A	917	27	55.1	399	11	US-11-188-298-18876	Sequence 18876, A
844	27	55.1	352	11	US-11-188-298-14587	Sequence 21304, A	918	27	55.1	400	11	US-11-096-568A-26467	Sequence 26467, A
845	27	55.1	353	9	US-10-506-454-38	Sequence 38, Appl	919	27	55.1	401	11	US-11-188-298-21200	Sequence 21200, A
846	27	55.1	353	9	US-10-506-454-1626	Sequence 1626, Ap	920	27	55.1	405	11	US-11-188-298-8086	Sequence 8086, Ap
847	27	55.1	353	11	US-11-096-568A-12641	Sequence 12641, A	921	27	55.1	405	11	US-11-188-298-17030	Sequence 17030, A
848	27	55.1	353	11	US-11-188-298-1975	Sequence 1975, Ap	922	27	55.1	405	11	US-11-188-298-18413	Sequence 18413, A
849	27	55.1	353	11	US-11-188-298-3401	Sequence 3401, Ap	923	27	55.1	406	11	US-11-188-298-10957	Sequence 10957, A
850	27	55.1	353	11	US-11-188-298-8557	Sequence 8557, Ap	924	27	55.1	407	11	US-11-188-298-6752	Sequence 6752, Ap
851	27	55.1	354	11	US-11-188-298-16534	Sequence 16534, A	925	27	55.1	408	11	US-11-188-298-5419	Sequence 5419, Ap
852	27	55.1	355	11	US-11-188-298-2002	Sequence 2002, Ap	926	27	55.1	413	11	US-11-079-463-10384	Sequence 10384, Ap
853	27	55.1	355	11	US-11-188-298-2856	Sequence 2856, Ap	927	27	55.1	416	11	US-11-188-298-18719	Sequence 18719, A
854	27	55.1	355	11	US-11-188-298-4104	Sequence 4104, Ap	928	27	55.1	420	11	US-11-188-298-4754	Sequence 4754, Ap
855	27	55.1	355	11	US-11-188-298-5414	Sequence 5414, Ap	929	27	55.1	422	9	US-10-857-780-21	Sequence 21, Appl
856	27	55.1	355	11	US-11-188-298-7373	Sequence 7373, Ap	930	27	55.1	422	11	US-11-127-817-18	Sequence 18, Appl
857	27	55.1	355	11	US-11-188-298-11094	Sequence 11094, A	931	27	55.1	422	11	US-11-180-044-5	Sequence 5, Appl1
858	27	55.1	355	11	US-11-188-298-12526	Sequence 12526, A	932	27	55.1	422	11	US-11-180-044-8	Sequence 8, Appl1
859	27	55.1	355	11	US-11-188-298-13626	Sequence 13626, A	933	27	55.1	424	11	US-11-188-298-5163	Sequence 5163, Ap
860	27	55.1	355	11	US-11-188-298-14222	Sequence 14222, A	934	27	55.1	424	11	US-11-096-568A-19820	Sequence 19820, A
861	27	55.1	355	11	US-11-188-298-14839	Sequence 14839, A	935	27	55.1	426	11	US-11-127-817-20	Sequence 20, Appl
862	27	55.1	355	11	US-11-188-298-15871	Sequence 15871, A	936	27	55.1	426	11	US-11-180-044-10	Sequence 10, Appl
863	27	55.1	355	11	US-11-188-298-18521	Sequence 18521, A	937	27	55.1	426	11	US-11-087-099-9050	Sequence 9050, Ap
864	27	55.1	355	11	US-11-188-298-21524	Sequence 21524, A	938	27	55.1	426	11	US-11-188-298-16384	Sequence 16384, A
865	27	55.1	355	11	US-11-188-298-21901	Sequence 21901, A	939	27	55.1	427	11	US-11-188-298-15495	Sequence 15495, A
866	27	55.1	356	11	US-11-188-298-2102	Sequence 2102, Ap	940	27	55.1	428	9	US-10-793-626-2050	Sequence 2050, Ap
867	27	55.1	356	11	US-11-188-298-6648	Sequence 6648, Ap	941	27	55.1	428	11	US-11-087-099-5430	Sequence 5430, Ap
868	27	55.1	356	11	US-11-188-298-8004	Sequence 8004, Ap	942	27	55.1	428	11	US-11-096-568A-1819	Sequence 1819, A
869	27	55.1	356	11	US-11-188-298-10971	Sequence 10971, A	943	27	55.1	428	11	US-11-096-568A-20204	Sequence 20204, A
870	27	55.1	356	11	US-11-188-298-19653	Sequence 19653, A	944	27	55.1	430	11	US-11-096-568A-10405	Sequence 10405, A
871	27	55.1	357	11	US-11-188-298-3075	Sequence 3075, Ap	945	27	55.1	431	11	US-11-188-298-1385	Sequence 1385, A
872	27	55.1	357	11	US-11-188-298-18560	Sequence 18560, A	946	27	55.1	434	9	US-10-632-150-24	Sequence 24, Appl
873	27	55.1	357	11	US-11-188-298-20405	Sequence 20405, A	947	27	55.1	434	10	US-11-106-014-24	Sequence 24, Appl
874	27	55.1	357	11	US-11-188-298-22373	Sequence 22373, A	948	27	55.1	434	11	US-11-073-460-24	Sequence 24, Appl
875	27	55.1	358	11	US-11-188-298-6025	Sequence 6025, Ap	949	27	55.1	434	11	US-11-073-460-24	Sequence 24, Appl
876	27	55.1	358	11	US-11-188-298-11178	Sequence 11178, A	950	27	55.1	435	11	US-11-096-568A-29831	Sequence 29831, A
877	27	55.1	358	11	US-11-188-298-13757	Sequence 13757, A	951	27	55.1	435	11	US-11-188-298-9470	Sequence 9470, Ap
878	27	55.1	359	11	US-11-188-298-11038	Sequence 11038, A	952	27	55.1	435	11	US-11-188-298-9470	Sequence 9470, Ap
879	27	55.1	359	11	US-11-096-568A-27737	Sequence 27737, A	953	27	55.1	435	11	US-11-188-298-1839	Sequence 1839, A
880	27	55.1	360	11	US-11-188-298-22023	Sequence 22023, A	954	27	55.1	436	11	US-11-188-298-3170	Sequence 3170, A
881	27	55.1	361	11	US-11-188-298-3372	Sequence 3372, Ap	955	27	55.1	439	11	US-11-072-512-3658	Sequence 3658, Ap
882	27	55.1	361	11	US-11-188-298-6289	Sequence 6289, Ap	956	27	55.1	439	11	US-11-096-568A-26466	Sequence 26466, A
883	27	55.1	361	11	US-11-188-298-8937	Sequence 8937, Ap	957	27	55.1	444	9	US-10-513-639-21	Sequence 21, Appl
884	27	55.1	362	9	US-10-821-234-1148	Sequence 1148, Ap	958	27	55.1	445	11	US-11-096-568A-22951	Sequence 22951, A
885	27	55.1	365	11	US-11-087-099-12157	Sequence 12157, A	959	27	55.1	446	11	US-11-098-886-10531	Sequence 10531, A
886	27	55.1	365	11	US-11-188-298-8929	Sequence 8929, Ap	960	27	55.1	447	11	US-11-087-099-1774	Sequence 1774, Ap
887	27	55.1	365	11	US-11-188-298-7577	Sequence 7577, Ap	961	27	55.1	448	9	US-10-519-228-5	Sequence 5, Appl1
888	27	55.1	366	9	US-10-467-657-2544	Sequence 2544, Ap	962	27	55.1	450	11	US-11-096-568A-27505	Sequence 27505, A
889	27	55.1	366	11	US-11-096-666-11126	Sequence 11126, Ap	963	27	55.1	451	11	US-11-087-099-8932	Sequence 8932, Ap
890	27	55.1	367	11	US-11-087-099-3681	Sequence 3681, Ap	964	27	55.1	451	11	US-11-188-298-14385	Sequence 14385, A
891	27	55.1	367	11	US-11-188-298-2719	Sequence 2719, Ap	965	27	55.1	452	11	US-11-087-099-5863	Sequence 5863, Ap
892	27	55.1	369	11	US-11-188-298-5851	Sequence 5851, Ap	966	27	55.1	453	11	US-11-188-298-9021	Sequence 9021, Ap
893	27	55.1	370	11	US-11-188-298-3719	Sequence 3719, Ap	967	27	55.1	453	11	US-11-045-004-1064	Sequence 1064, Ap
894	27	55.1	370	11	US-11-188-298-4861	Sequence 4861, Ap	968	27	55.1	455	11	US-11-188-298-21338	Sequence 21338, A
895	27	55.1	370	11	US-11-188-298-13362	Sequence 13362, A	969	27	55.1	456	9	US-10-641-678-51	Sequence 51, Appl
896	27	55.1	372	11	US-11-096-568A-28952	Sequence 28952, A	970	27	55.1	458	11	US-11-096-568A-11092	Sequence 11092, A
897	27	55.1	372	11	US-11-096-568A-29832	Sequence 29832, A							

```
971 27 55.1 458 11 US-11-079-463-8027 Sequence 8027, Ap
972 27 55.1 461 11 US-11-188-298-3923 Sequence 3923, Ap
973 27 55.1 462 11 US-11-096-568A-10404 Sequence 10404, A
974 27 55.1 464 11 US-11-127-817-19 Sequence 19, Appl
975 27 55.1 464 11 US-11-180-044-2 Sequence 2, Appl
976 27 55.1 468 11 US-11-122-144-8 Sequence 8, Appl
977 27 55.1 468 11 US-11-188-298-15405 Sequence 15405, A
978 27 55.1 470 9 US-10-878-556A-101 Sequence 101, App
979 27 55.1 471 9 US-10-467-657-6022 Sequence 6022, Ap
980 27 55.1 472 9 US-10-650-326B-12 Sequence 12, Appl
981 27 55.1 472 9 US-10-921-793-8 Sequence 8, Appl
982 27 55.1 472 9 US-10-931-198-8 Sequence 8, Appl
983 27 55.1 472 9 US-10-942-042-8 Sequence 8, Appl
984 27 55.1 472 11 US-11-092-353-3 Sequence 3, Appl1
985 27 55.1 473 11 US-11-087-099-9042 Sequence 9042, A
986 27 55.1 473 11 US-11-188-298-19361 Sequence 19361, A
987 27 55.1 475 11 US-11-096-568A-11091 Sequence 11091, A
988 27 55.1 475 11 US-11-096-568A-21668 Sequence 21668, A
989 27 55.1 478 11 US-11-096-568A-21667 Sequence 21667, A
990 27 55.1 479 11 US-11-096-568A-19818 Sequence 19818, A
991 27 55.1 479 11 US-11-096-568A-21666 Sequence 21666, A
992 27 55.1 481 11 US-11-079-463-6068 Sequence 6068, Ap
993 27 55.1 482 11 US-11-096-568A-27735 Sequence 27735, A
994 27 55.1 481 11 US-11-188-298-1903 Sequence 1903, Ap
995 27 55.1 495 11 US-11-188-298-5237 Sequence 5237, Ap
996 27 55.1 497 11 US-11-188-298-16695 Sequence 16695, A
997 27 55.1 500 11 US-11-096-568A-29830 Sequence 29830, A
998 27 55.1 500 11 US-11-188-298-8362 Sequence 8362, Ap
999 27 55.1 501 11 US-11-096-568A-20831 Sequence 20831, A
1000 27 55.1 503 9 US-10-873-528-74 Sequence 74, Appl
```

ALIGNMENTS

```
RESULT 1
US-10-530-061-1714
; Sequence 1714, Application US/10530061
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1714
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1714

Query Match 100.0%; Score 49; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Db 1 GTLGIVCPI 9
7 GTLGIVCPI 15

RESULT 2
US-10-530-061-1715
; Sequence 1715, Application US/10530061
```

```
; Publication No. US20060079453A1
; GENERAL INFORMATION:
; APPLICANT: SIDNEY, JOHN
; APPLICANT: SOUTHWOOD, SCOTT
; APPLICANT: SOUTHWOOD, SCOTT
; TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
; FILE REFERENCE: 2060.033US02/EKS/M-M
; CURRENT APPLICATION NUMBER: US/10/530,061
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31308
; PRIOR FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/416,207
; PRIOR FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/417,269
; PRIOR FILING DATE: 2002-10-08
; NUMBER OF SEQ ID NOS: 2503
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1715
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-10-530-061-1715

Query Match 100.0%; Score 49; DB 9; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0064;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Db 1 GTLGIVCPI 9
5 GTLGIVCPI 13

RESULT 3
US-10-511-814-8
; Sequence 8, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Westbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
; FILE REFERENCE: 21108.0016U2
; CURRENT APPLICATION NUMBER: US/10/511,814
; CURRENT FILING DATE: 2004-10-19
; PRIOR APPLICATION NUMBER: PCT/US03/12667
; PRIOR FILING DATE: 2003-04-21
; PRIOR APPLICATION NUMBER: 60/374,245
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PaateSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 98
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:/Note =
; OTHER INFORMATION: Synthetic Construct
US-10-511-814-8

Query Match 100.0%; Score 49; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Db 1 GTLGIVCPI 9
85 GTLGIVCPI 93

RESULT 4
US-10-511-814-11
; Sequence 11, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
```

```
APPLICANT: Westbrook, III, Thomas F.
TITLE OF INVENTION: E7 REGULATION OF P21 (CIP1) THROUGH AKT
FILE REFERENCE: 21108.001602
CURRENT APPLICATION NUMBER: US/10/511,814
CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US03/12867
PRIOR FILING DATE: 2003-04-21
PRIOR APPLICATION NUMBER: 60/374,245
PRIOR FILING DATE: 2002-04-19
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 11
LENGTH: 98
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note =
OTHER INFORMATION: Synthetic Construct
US-10-511-814-11
```

```
Query Match      100.0%; Score 49; DB 8; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 GTTGIVCP1 9
        |||||
Db      85 GTTGIVCP1 93
```

```
RESULT 5
US-10-530-253-14
Sequence 14, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 14
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-14
```

```
Query Match      100.0%; Score 49; DB 9; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 GTTGIVCP1 9
        |||||
Db      85 GTTGIVCP1 93
```

```
RESULT 6
US-11-179-478-4
Sequence 4, Application US/11179478
Publication No. US20050249745A1
GENERAL INFORMATION:
APPLICANT: BURGER, Alexander
APPLICANT: HALLER, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
TITLE OF INVENTION: FORMULATIONS AND METHODS OF USE
NUMBER OF SEQUENCES: 28
```

```
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/179,478
FILING DATE: 13-JULY-2005
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/654,129
FILING DATE: 04-Sep-2003
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE//DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-11-179-478-4
```

```
Query Match      100.0%; Score 49; DB 11; Length 98;
Best Local Similarity 100.0%; Pred. No. 0.039;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 GTTGIVCP1 9
        |||||
Db      85 GTTGIVCP1 93
```

```
RESULT 7
US-10-530-253-1
Sequence 1, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-1
```

```
Query Match      100.0%; Score 49; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 GTLGVCP1 9
| | | | |
Db 235 GTLGVCP1 243

RESULT 8
US-10-530-253-3
; Sequence 3, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-3

Query Match 100.0%; Score 49; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
| | | | |
Db 235 GTLGVCP1 243

RESULT 9
US-10-530-253-7
; Sequence 7, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-7

Query Match 100.0%; Score 49; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
| | | | |
Db 85 GTLGVCP1 93

RESULT 10
US-10-530-253-9
; Sequence 9, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 248
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-10-530-253-9

Query Match 100.0%; Score 49; DB 9; Length 248;
Best Local Similarity 100.0%; Pred. No. 0.093;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
| | | | |
Db 85 GTLGVCP1 93

RESULT 11
US-11-192-923A-2
; Sequence 2, Application US/11192923A
; Publication No. US20060018928A1
; GENERAL INFORMATION:
; APPLICANT: PANG, XIAOWU
; TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
; FILE REFERENCE: 116620-003
; CURRENT APPLICATION NUMBER: US/11/192,923A
; PRIOR FILING DATE: 2005-07-29
; PRIOR APPLICATION NUMBER: CN 03115272.4
; PRIOR FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: CN 03115273.2
; PRIOR FILING DATE: 2003-01-30
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-11-192-923A-2

Query Match 100.0%; Score 49; DB 11; Length 256;
Best Local Similarity 100.0%; Pred. No. 0.096;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGVCP1 9
| | | | |
Db 85 GTLGVCP1 93

RESULT 12
US-10-530-253-30
; Sequence 30, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Cassecci, Maria C.
; APPLICANT: Smith, Larry

```
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
PRIORITY FILING DATE: 2005-04-04
PRIORITY FILING DATE: 2003-10-02
PRIORITY FILING DATE: 2002-10-03
PRIORITY FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 30
LENGTH: 99
TYPE: PRT
ORGANISM: Human papillomavirus type 35
US-10-530-253-30
```

```
Query Match      83.7%; Score 41; DB 9; Length 99;
Best Local Similarity 87.5%; Pred. No. 1.1;
Matches 7; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 GTLGI VCP 8
         ||| ||| |||
DB      86 GTFGI VCP 93
```

```
RESULT 13
US-10-485-517-372
Sequence 372, Application US/10485517
Publication No. US20050256299A1
GENERAL INFORMATION:
APPLICANT: University of Sheffield
APPLICANT: Biosynexus Incorporated
APPLICANT: Foster, Simon
APPLICANT: Mond, James
TITLE OF INVENTION: Antigenic Polypeptides
FILE REFERENCE: P100629MO
CURRENT APPLICATION NUMBER: US/10/485,517
CURRENT FILING DATE: 2004-02-02
PRIORITY FILING DATE: 2001-08-02
PRIORITY FILING DATE: 2002-01-09
PRIORITY FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 424
SOFTWARE: PatentIn version 3.1
SEQ ID NO 372
LENGTH: 82
TYPE: PRT
ORGANISM: Staphylococcus aureus
US-10-485-517-372
```

```
Query Match      79.6%; Score 39; DB 9; Length 82;
Best Local Similarity 75.0%; Pred. No. 2.2;
Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1 GTLGI VCP 8
         ||| ||| |||
DB      14 GIVGV VCP 21
```

```
RESULT 14
US-10-530-061-1723
Sequence 1723, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.033US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530,061
CURRENT FILING DATE: 2005-04-04
```

```
PRIORITY APPLICATION NUMBER: PCT/US03/31308
PRIORITY FILING DATE: 2003-10-03
PRIORITY FILING DATE: 60/416,207
PRIORITY FILING DATE: 2002-10-03
PRIORITY FILING DATE: 2002-10-03
PRIORITY FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1723
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1723
```

```
Query Match      75.5%; Score 37; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 GTLGI VCP 8
         ||| ||| |||
DB      5 GSFGI VCP 12
```

```
RESULT 15
US-10-530-253-28
Sequence 28, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIORITY FILING DATE: 2003-10-02
PRIORITY FILING DATE: 2002-10-03
PRIORITY FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 28
LENGTH: 98
TYPE: PRT
ORGANISM: Human papillomavirus type 31
US-10-530-253-28
```

```
Query Match      75.5%; Score 37; DB 9; Length 98;
Best Local Similarity 75.0%; Pred. No. 6.2;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1 GTLGI VCP 8
         ||| ||| |||
DB      85 GSFGI VCP 92
```

```
RESULT 16
US-11-106-399-10
Sequence 10, Application US/11106399
Publication No. US20060002892A1
GENERAL INFORMATION:
APPLICANT: MATHEW, PORUNELLOOR A.
APPLICANT: BOLES, KENT S.
TITLE OF INVENTION: ILT USES THEREOF IN IMMUNE SYSTEM MODULATION
CURRENT APPLICATION NUMBER: US/11/106,399
CURRENT FILING DATE: 2005-04-14
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 10
LENGTH: 179
TYPE: PRT
```

ORGANISM: Homo sapiens
US-11-106-399-10

Query Match 75.5%; Score 37; DB 11; Length 179;
Best Local Similarity 85.7%; Pred. No. 11;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 GTLGIVC 7
Db 14 GTLGIVC 20

RESULT 17
US-10-530-253-5
Sequence 5, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassecci, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
PRIOR FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-5

Query Match 75.5%; Score 37; DB 9; Length 248;
Best Local Similarity 88.9%; Pred. No. 15;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTLGIVCP 9
Db 235 GTLGIVCP 243

RESULT 18
US-10-530-253-11
Sequence 11, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassecci, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
PRIOR FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 11
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus type 16
US-10-530-253-11

Query Match 75.5%; Score 37; DB 9; Length 248;
Best Local Similarity 88.9%; Pred. No. 15;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTLGIVCP 9
Db 85 GTLGIVCP 93

RESULT 19
US-11-188-298-3455
Sequence 3455, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 3455
LENGTH: 486
TYPE: PRT
ORGANISM: Pseudomonas putida
US-11-188-298-3455

Query Match 75.5%; Score 37; DB 11; Length 486;
Best Local Similarity 62.5%; Pred. No. 29;
Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTLGIVCP 8
Db 146 GTLGIVCP 153

RESULT 20
US-11-114-962-4
Sequence 4, Application US/11114962
Publication No. US20060030694A1
GENERAL INFORMATION:
APPLICANT: Kitajewski, Jan
APPLICANT: Shawber, Carrie
APPLICANT: Punashahi, Yasuhiro
TITLE OF INVENTION: Notch-Based Fusion Proteins And Uses Thereof
FILE REFERENCE: 0575/71308-A
CURRENT APPLICATION NUMBER: US/11/114,962
CURRENT FILING DATE: 2005-04-26
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PatentIn version 3.3
SEQ ID NO 4
LENGTH: 1379
TYPE: PRT
ORGANISM: Mus musculus
US-11-114-962-4

Query Match 75.5%; Score 37; DB 11; Length 1379;
Best Local Similarity 66.7%; Pred. No. 77;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTLGIVCP 9
Db 1152 GTLGIVCP 1160

RESULT 21
US-10-530-061-1726
Sequence 1726, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES


```
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530.061
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1726
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1726
```

```
Query Match 73.5%; Score 36; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1.6;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 GTLGIWCP 8
Db 7 GTVNIWCP 14
```

```
RESULT 22
US-10-530-061-1727
Sequence 1727, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530.061
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1727
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1727

Query Match 73.5%; Score 36; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1.6;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 GTLGIWCP 8
Db 5 GTVNIWCP 12
```

```
RESULT 23
US-10-530-061-1733
Sequence 1733, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530.061
CURRENT FILING DATE: 2005-04-04
```

```
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1733
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1733
```

```
Query Match 73.5%; Score 36; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1.6;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 GTLGIWCP 8
Db 7 GTLQWVCP 14
```

```
RESULT 24
US-10-530-061-1734
Sequence 1734, Application US/10530061
Publication No. US20060079453A1
GENERAL INFORMATION:
APPLICANT: SIDNEY, JOHN
APPLICANT: SOUTHWOOD, SCOTT
APPLICANT: SETTE, ALESSANDRO
TITLE OF INVENTION: HLA BINDING PEPTIDES AND THEIR USES
FILE REFERENCE: 2060.03US02/EKS/M-M
CURRENT APPLICATION NUMBER: US/10/530.061
PRIOR APPLICATION NUMBER: PCT/US03/31308
PRIOR FILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: 60/416,207
PRIOR FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: 60/417,269
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 2503
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1734
LENGTH: 15
TYPE: PRT
ORGANISM: Human papillomavirus
US-10-530-061-1734
```

```
Query Match 73.5%; Score 36; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 1.6;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 GTLGIWCP 8
Db 5 GTLQWVCP 12
```

```
RESULT 25
US-10-530-253-29
Sequence 29, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Casasetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhinney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530.253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
```

```

; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 29
; LENGTH: 97
; TYPE: PRT
; ORGANISM: Human papillomavirus type 33
US-10-530-253-29

```

```

Query Match          73.5%; Score 36; DB 9; Length 97;
Best Local Similarity 75.0%; Pred. No. 9.3;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 GTGIVCP 8
        ||:||||
Db      85 GTVNVICP 92

```

```

RESULT 26
US-10-530-253-34
; Sequence 34, Application US/10530253
; Publication No. US20060014926A1
; GENERAL INFORMATION:
; APPLICANT: Casasetti, Maria C.
; APPLICANT: Smith, Larry
; APPLICANT: Jeffrey K. Pullen
; APPLICANT: Susan P. McElhinney
; TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
; FILE REFERENCE: 00630/100M137-US2
; CURRENT APPLICATION NUMBER: US/10/530,253
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US2003/031726
; PRIOR FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: US 60/415,929
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 34
; LENGTH: 99
; TYPE: PRT
; ORGANISM: Human papillomavirus type 52
US-10-530-253-34

```

```

Query Match          73.5%; Score 36; DB 9; Length 99;
Best Local Similarity 75.0%; Pred. No. 9.5;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 GTGIVCP 8
        ||:||||
Db      87 GTLOVWCP 94

```

```

RESULT 27
US-11-188-298-18750
; Sequence 18750, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 18750
; LENGTH: 555
; TYPE: PRT
; ORGANISM: Azotobacter vinelandii
US-11-188-298-18750

```

```

Query Match          73.5%; Score 36; DB 11; Length 555;

```

```

Query Match          73.5%; Score 36; DB 11; Length 788;
Best Local Similarity 75.0%; Pred. No. 69;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 GTGIVCP 8
        ||:||||
Db      215 GTVGVICP 222

```

```

RESULT 28
US-11-188-298-4463
; Sequence 4463, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 4463
; LENGTH: 788
; TYPE: PRT
; ORGANISM: Agrobacterium tumefaciens str. C58 (U. Washington)
US-11-188-298-4463

```

```

Query Match          73.5%; Score 36; DB 11; Length 788;
Best Local Similarity 75.0%; Pred. No. 69;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 GTGIVCP 8
        ||:||||
Db      647 GTVGVICP 654

```

```

RESULT 29
US-11-188-298-7394
; Sequence 7394, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 7394
; LENGTH: 798
; TYPE: PRT
; ORGANISM: Agrobacterium tumefaciens str. C58
US-11-188-298-7394

```

```

Query Match          73.5%; Score 36; DB 11; Length 798;
Best Local Similarity 75.0%; Pred. No. 70;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      1 GTGIVCP 8
        ||:||||
Db      657 GTVGVICP 664

```

```

RESULT 30
US-11-072-512-2253
; Sequence 2253, Application US/11072512
; Publication No. US20060029945A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
US-11-072-512-2253

```

```
APPLICANT: SATO, HIROYUKI
APPLICANT: ISHII, SHIZUKO
APPLICANT: YAMAMOTO, JUN-ICHI
APPLICANT: ISONO, YUUKO
APPLICANT: HIO, YURI
APPLICANT: OTSUKA, KAORU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: SEKI, NAOHICO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: Novel full length cDNA
FILE REFERENCE: 084335-0191
CURRENT APPLICATION NUMBER: US/11/072,512
CURRENT FILING DATE: 2005-03-07
PRIOR APPLICATION NUMBER: US 60/350,978
PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: JP 2001-379298
PRIOR FILING DATE: 2001-11-05
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2253
LENGTH: 204
TYPE: PRT
ORGANISM: Homo sapiens
US-11-072-512-2253
```

```
Query Match 72.4% Score 35.5; DB 11; Length 204;
Best Local Similarity 80.0%; Pred. No. 23;
Matches 8; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
```

```
QY 1 GTL-GIVCPI 9
Db 107 GTLSGWCPI 116
```

```
RESULT 31
US-11-055-822-788
Sequence 788, Application US/11055822
Publication No. US20050260707A1
GENERAL INFORMATION:
APPLICANT: Pompejus, Markus
APPLICANT: Kroeger, Burkhard
APPLICANT: Schroeder, Hartwig
APPLICANT: Zeidler, Oskar
APPLICANT: Haberhauser, Gregor
TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING
FILE REFERENCE: BGI-121PCPN
CURRENT APPLICATION NUMBER: US/11/055,822
CURRENT FILING DATE: 2005-02-11
PRIOR APPLICATION NUMBER: 09/606,740
PRIOR FILING DATE: 2000-06-23
PRIOR APPLICATION NUMBER: 60/141,031
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: 60/142,101
PRIOR FILING DATE: 1999-07-02
PRIOR APPLICATION NUMBER: 60/148,613
PRIOR FILING DATE: 1999-08-12
PRIOR APPLICATION NUMBER: 60/187,970
PRIOR FILING DATE: 2000-03-09
PRIOR APPLICATION NUMBER: DE 19930476.9
PRIOR FILING DATE: 1999-07-01
PRIOR APPLICATION NUMBER: DE 19931415.2
PRIOR FILING DATE: 1999-07-08
PRIOR APPLICATION NUMBER: DE 19931418.7
PRIOR FILING DATE: 1999-07-08
PRIOR APPLICATION NUMBER: DE 19931419.5
PRIOR FILING DATE: 1999-07-08
PRIOR APPLICATION NUMBER: DE 19931420.9
```

```
PRIOR FILING DATE: 1999-07-08
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1158
SEQ ID NO 788
LENGTH: 162
TYPE: PRT
ORGANISM: Corynebacterium glutamicum
US-11-055-822-788
```

```
Query Match 71.4% Score 35; DB 11; Length 162;
Best Local Similarity 71.4%; Pred. No. 23;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3 LGIVCPI 9
Db 148 LGIVCPL 154
```

```
RESULT 32
US-11-188-298-8523
Sequence 8523, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 8523
LENGTH: 162
TYPE: PRT
ORGANISM: Corynebacterium glutamicum ATCC 13032
US-11-188-298-8523
```

```
Query Match 71.4% Score 35; DB 11; Length 162;
Best Local Similarity 71.4%; Pred. No. 23;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3 LGIVCPI 9
Db 148 LGIVCPL 154
```

```
RESULT 33
US-11-188-298-10878
Sequence 10878, Application US/11188298
Publication No. US20060075522A1
GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53452)B
CURRENT APPLICATION NUMBER: US/11/188,298
CURRENT FILING DATE: 2005-07-22
PRIOR APPLICATION NUMBER: 60/592,978
PRIOR FILING DATE: 2004-07-31
NUMBER OF SEQ ID NOS: 22569
SEQ ID NO 10878
LENGTH: 163
TYPE: PRT
ORGANISM: Corynebacterium efficiens YS-314
US-11-188-298-10878
```

```
Query Match 71.4% Score 35; DB 11; Length 163;
Best Local Similarity 71.4%; Pred. No. 23;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3 LGIVCPI 9
Db 148 LGIVCPL 154
```

```

RESULT 34
US-11-188-298-12303
; Sequence 12303, Application US/11188298
; Publication No. US2006075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 12303
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum ATCC 13032
US-11-188-298-12303

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 163;
Matches 5; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 3 GTGIVCP 9
DB 149 LGVVCPL 155

RESULT 35
US-11-098-686-11340
; Sequence 11340, Application US/11098686
; Publication No. US20060024696A1
; GENERAL INFORMATION:
; APPLICANT: Kapur, Vivek and Gebhart, Connie J.
; TITLE OF INVENTION: NUCLEIC ACID AND POLYPEPTIDE SEQUENCES
; FILE REFERENCE: 09531-128001
; CURRENT APPLICATION NUMBER: US/11/098,686
; PRIOR FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: PCT/US03/31318
; PRIOR FILING DATE: 2003-10-01
; PRIOR APPLICATION NUMBER: US 60/416,395
; PRIOR FILING DATE: 2002-10-04
; NUMBER OF SEQ ID NOS: 11433
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11340
; LENGTH: 471
; TYPE: PRT
; ORGANISM: Lawsonia intracellularis
US-11-098-686-11340

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 471;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 GTGIVCP 9
DB 244 GDLGICPL 252

RESULT 36
US-11-188-298-8186
; Sequence 8186, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31

```

```

; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 8186
; LENGTH: 484
; TYPE: PRT
; ORGANISM: Comamonas testosteroni
US-11-188-298-8186

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 484;
Matches 4; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTGIVCP 8
DB 144 GVGIVCP 151

RESULT 37
US-11-188-298-15333
; Sequence 15333, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 15333
; LENGTH: 485
; TYPE: PRT
; ORGANISM: Burkholderia cepacia
US-11-188-298-15333

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 485;
Matches 4; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTGIVCP 8
DB 145 GVGIVCP 152

RESULT 38
US-11-188-298-16022
; Sequence 16022, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 16022
; LENGTH: 486
; TYPE: PRT
; ORGANISM: Comamonas sp. JS765
US-11-188-298-16022

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 486;
Matches 4; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTGIVCP 8
DB 146 GVGIVCP 153

RESULT 39

```

```
US-11-188-298-10771
; Sequence 10771, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 10771
; LENGTH: 503
; TYPE: PRT
; ORGANISM: Ralstonia metallidurans
US-11-188-298-10771

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 503;
Matches 4; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1 GTLGI VCP 8
Db 163 GVLGTTCPI 170

RESULT 40
US-11-096-568A-26450
; Sequence 26450, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 26450
; LENGTH: 535
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(535)
; OTHER INFORMATION: Ceres Seq. ID no. 13566660
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (432)..(432)
; OTHER INFORMATION: Xaa is any aa, unknown or other
US-11-096-568A-26450

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 535;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GTLGI VCP 9
Db 38 GVLGTTCPI 46

RESULT 41
US-11-096-568A-26449
; Sequence 26449, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01

NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 26449
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(592)
; OTHER INFORMATION: Ceres Seq. ID no. 13566659
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (489)..(489)
; OTHER INFORMATION: Xaa is any aa, unknown or other
US-11-096-568A-26449

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 592;
Matches 6; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GTLGI VCP 9
Db 95 GVLGTTCPI 103

RESULT 42
US-11-096-568A-31774
; Sequence 31774, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 31774
; LENGTH: 1003
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1003)
; OTHER INFORMATION: Ceres Seq. ID no. 13568777
US-11-096-568A-31774

Query Match
Best Local Similarity 71.4%; Score 35; DB 11; Length 1003;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 GTLGI VCP 9
Db 383 GEBGVTCPI 391

RESULT 43
US-11-096-568A-31773
; Sequence 31773, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nikolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptide
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 31773
; LENGTH: 1023
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc_feature
```

```
; LOCATION: (1)..(1023)
; OTHER INFORMATION: Ceres Seq. ID no. 13588776
US-11-096-568A-31773
```

```
Query Match          71.4%; Score 35; DB 11; Length 1023;
Best Local Similarity 66.7%; Pred. No. 1.4e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 1 GTLGIVCP 9
    |||:|
Db 403 GEGGVCP 411
```

```
RESULT 44
US-11-096-568A-31772
; Sequence 31772, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; PRIORITY FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 31772
; LENGTH: 1054
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; NAME/KEY: misc_feature
; LOCATION: (1)..(1054)
; OTHER INFORMATION: Ceres Seq. ID no. 13588775
US-11-096-568A-31772
```

```
Query Match          71.4%; Score 35; DB 11; Length 1054;
Best Local Similarity 66.7%; Pred. No. 1.4e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 1 GTLGIVCP 9
    |||:|
Db 434 GEGGVCP 442
```

```
RESULT 45
US-11-188-298-5983
; Sequence 5983, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIORITY FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIORITY FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 5983
; LENGTH: 435
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-11-188-298-5983
```

```
Query Match          69.4%; Score 34; DB 11; Length 435;
Best Local Similarity 62.5%; Pred. No. 91;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 1 GTLGIVCP 8
    |||:|
Db 155 GVGCIICP 162
```

RESULT 46

```
US-11-188-298-630
; Sequence 630, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIORITY FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIORITY FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 630
; LENGTH: 491
; TYPE: PRT
; ORGANISM: Candida glabrata
US-11-188-298-630
```

```
Query Match          69.4%; Score 34; DB 11; Length 491;
Best Local Similarity 62.5%; Pred. No. 1e+02;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 1 GTLGIVCP 8
    |||:|
Db 149 GVGCIICP 156
```

```
RESULT 47
US-11-188-298-6223
; Sequence 6223, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIORITY FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIORITY FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 6223
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-11-188-298-6223
```

```
Query Match          69.4%; Score 34; DB 11; Length 497;
Best Local Similarity 62.5%; Pred. No. 1e+02;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 1 GTLGIVCP 8
    |||:|
Db 155 GVGCIICP 162
```

```
RESULT 48
US-11-188-298-3033
; Sequence 3033, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIORITY FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIORITY FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 3033
; LENGTH: 796
; TYPE: PRT
; ORGANISM: Burkholderia fungorum
US-11-188-298-3033
```

US-11-188-298-3033

Search completed: May 5, 2006, 08:40:43
Job time : 9.4 secs

Query Match 69.4%; Score 34; DB 11; Length 796;
Best Local Similarity 62.5%; Pred. No. 1.6e+02;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 GTIGIVCP 8
|:||||
DB 656 GVIGIACP 663

RESULT 49

US-11-188-298-10633
; Sequence: 10633, Application US/11188298
; Publication No. US20060075522A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: GENES AND USES FOR PLANT IMPROVEMENT
; FILE REFERENCE: 38-21(53452)B
; CURRENT APPLICATION NUMBER: US/11/188,298
; PRIOR FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 60/592,978
; PRIOR FILING DATE: 2004-07-31
; NUMBER OF SEQ ID NOS: 22569
; SEQ ID NO 10633
; LENGTH: 798
; TYPE: PRT
; ORGANISM: Burkholderia fungorum
US-11-188-298-10633

Query Match 69.4%; Score 34; DB 11; Length 798;
Best Local Similarity 62.5%; Pred. No. 1.6e+02;
Matches 5; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 GTIGIVCP 8
|:||||
DB 658 GVIGIACP 665

RESULT 50

US-10-204-639-15
; Sequence 15, Application US/10204639
; Publication No. US20060063152A1
; GENERAL INFORMATION:
; APPLICANT: Osamu Ohara
; APPLICANT: Takahiro Nagase
; APPLICANT: Daisuke Nakajima
; TITLE OF INVENTION: NOVEL GENE AND PROTEIN ENCODED BY THE GENE
; FILE REFERENCE: PH-1416-PCT
; CURRENT APPLICATION NUMBER: US/10/204,639
; PRIOR FILING DATE: 2002-08-22
; PRIOR APPLICATION NUMBER: JP 2000-389742
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: JP 2001-095524
; PRIOR FILING DATE: 2001-03-29
; PRIOR APPLICATION NUMBER: JP 2001-127066
; PRIOR FILING DATE: 2001-04-25
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 1051
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-204-639-15

Query Match 69.4%; Score 34; DB 9; Length 1051;
Best Local Similarity 75.0%; Pred. No. 2.1e+02;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GTIGIVCP 8
|:||||
DB 937 GRLGIVCP 944

THIS PAGE LEFT BLANK